Regional Outdoor Recreation Areas Study

Edmonton Metropolitan Regional Planning Commission

Regional Outdoor Recreation Areas Study

Resource Inventory and General Planning Considerations for the Edmonton Region

Edmonton Metropolitan Regional Planning Commission

January 1991

Table of Contents

Page

I. **Background** 1

1. Introduction 1
2. Regional Concerns 3

II. **Regional Outdoor Recreation Areas** 5

1. Preamble 5
2. Classification of Outdoor Recreation Areas 5
3. Historical and Cultural Sites 19

III. **General Planning Considerations** 20

1. Land Fragmentation 21
2. Municipal and Environmental Reserves 21
3. Remnant Forest Areas 21
4. Representative Ecological Reserves 21
5. Conservation Areas 22
6. Lake Shorelands 22
7. Watercourses 22
8. Trails 22
9. Theme Trails or Roadways 23
10. Public Paths 23

IV. **Implementation** 24

1. Implementation at the Provincial Level 24
2. Implementation at the Regional Level 26
3. Implementation at the Municipal Level 27

V. **Conclusions** 29

Appendix 1 Regional Outdoor Recreation Areas Data Sheets 31

Appendix 2 Canadian Land Inventory: Description of Land Capability Maps 185

Bibliography 191

List of Maps and Tables

Map 1 - Study Area 2
Map 2 - Regional Outdoor Recreation Areas 11
Table 1 - Regional Outdoor Recreation Areas 8
Table 2 - Historical and Cultural Sites 10

I. Background

1. Introduction

The Edmonton Metropolitan Region is a highly urbanized region (Map 1). Both urban and rural municipalities provide opportunities for outdoor recreation (e.g. parks, trails). However the urban municipalities do not have the large tracts of relatively undisturbed natural environment (forests, uplands, etc.), the variety of topographic and natural features (lakes, knob and kettle terrain, sand dunes, etc.) or the abundance of wildlife that can still be found in the rural municipalities. Therefore, both urban and rural residents look to the rural municipalities for many of the outdoor recreation opportunities associated with the "natural" environment.[1]

The term "outdoor recreation" encompasses a broad spectrum of activities, from bird watching to downhill skiing, just as the term "outdoor recreation area" can include anything from a fragile wildlife habitat to a downhill ski development. However, at some point, for some areas and some types of activity, anything beyond minimum development will destroy the area and/or the enjoyment of the activity. Therefore, it is necessary to try to distinguish between "conservation areas" and "conservation/recreation areas". Conservation areas are those areas which are so unique and/or environmentally sensitive that conservation must be the primary concern - even at the expense of any form of active recreation. Conservation/Recreation areas are those areas where the natural environment should be conserved as much as possible - both for the sake of the environment itself and for its recreational value.

National, provincial and regional surveys and studies of recreation trends indicate that outdoor recreation activities are, and will likely continue to be, very popular. A "natural" environment is important for many outdoor recreation activities. But the number of "natural areas" in the Edmonton Region is limited. The loss of potential outdoor recreation areas will put an increasing strain on existing areas. There is a growing awareness of the need to protect a shrinking resource - recreation open space - both for environmental and recreational reasons. Otherwise, in time, existing outdoor recreation areas may no longer be able to provide a "natural" setting.

To meet a regional demand for outdoor recreation, it is necessary for both urban and rural municipalities to consider identifying, protecting and even developing outdoor recreation areas from a regional, rather than local, perspective.

Outdoor recreation planning on a regional scale for the Edmonton Region is not a new idea. For example, in 1963, the, then, Edmonton Regional Planning Commission (ERPC) prepared the ***Metropolitan River Valleys - Parks and Recreation Study.*** At the ERPC meeting of August 30th, 1972, a motion was carried supporting the need for regional parks and the establish-

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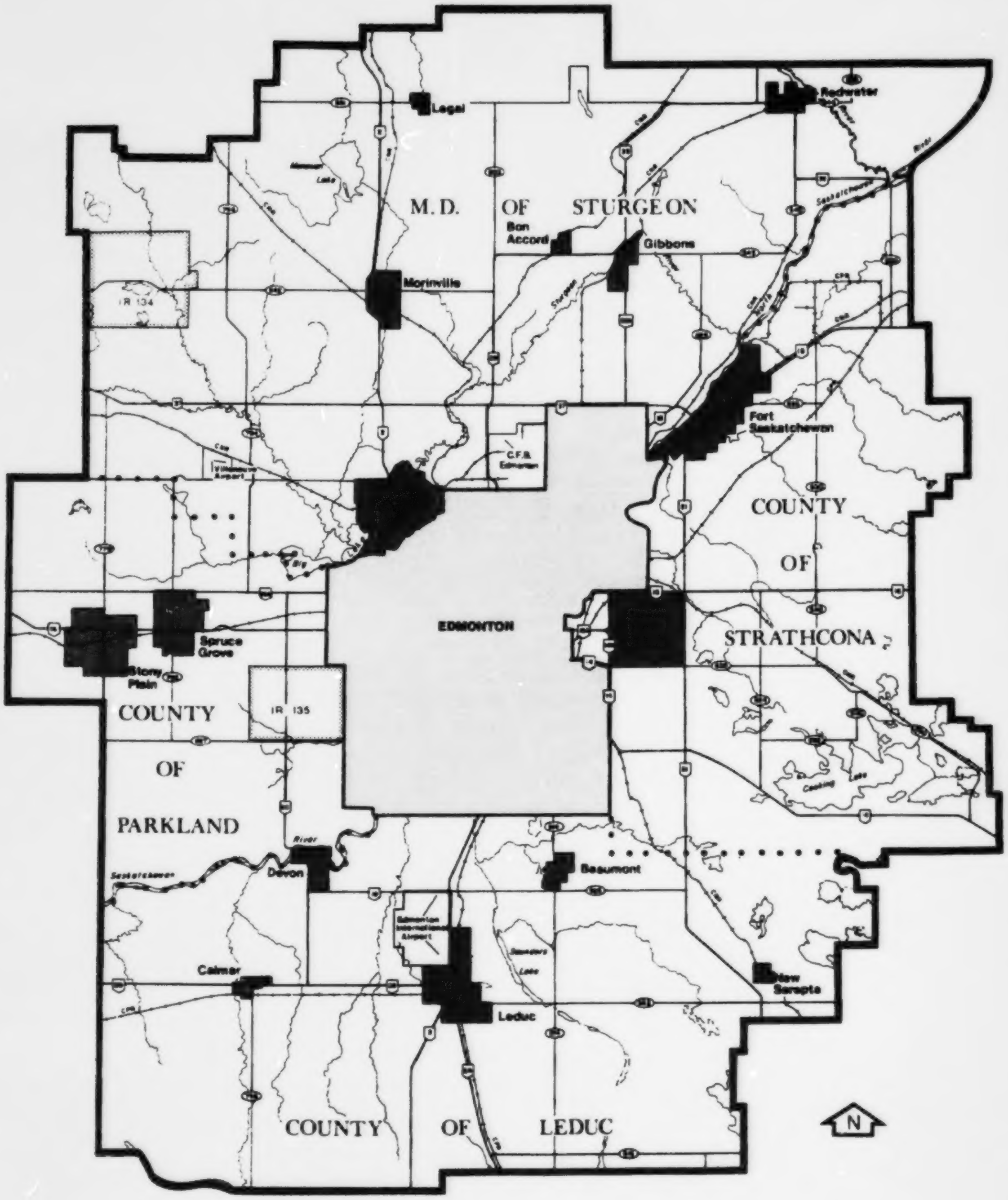
[1] As opposed to an artificial landscaped environment, as in a formal park or a golf course. Few, if any, areas in the Region have remained unaffected by human activity and therefore few, if any, areas could be considered completely natural.


Legal
Redwater
M.D. OF STURGEON
Bon Accord
Gibbons
Morinville
IR 134
Fort Saskatchewan
C.F.B. Edmonton
Villeneuve Airport
COUNTY OF STRATHCONA
EDMONTON
Spruce Grove
Stony Plain
COUNTY OF PARKLAND
IR 135
Cooking Lake
Saskatchewan River
Devon
Beaumont
Edmonton International Airport
Saunders Lake
New Sarepta
Calmar
Leduc
COUNTY OF LEDUC
N

Map 1

Study Area

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ment of a fund for the acquisition of suitable land for regional parks. In 1973, the Planning and Research Section of the City of Edmonton Parks and Recreation prepared a ***Regional Parks Study.*** The Region's lakes were examined in the ERPC's 1974 ***Regional Lake Perspective.***

The Edmonton Metropolitan Regional Plan, which came into effect in 1984, contains policies requiring municipalities to identify and protect environmentally sensitive areas (as defined in the Plan) and regionally significant outdoor recreation areas (as identified in Policy 8.2). Furthermore, Policy 8.5 encourages municipalities to work together, through inter-municipal or joint municipal - provincial recreation programs and/or agreements, to develop and maintain "... regionally significant recreation areas, circulation systems and facilities."

In spite of Regional Plan policies and municipal efforts, local Councils and recreation boards have had neither the time nor the resources to consider recreation/conservation from a regional perspective.

2. Regional Concerns

This report examines and compares existing and potential outdoor recreation areas from a regional perspective. There are a number of factors that make outdoor recreation areas a regional concern.

(a) Areas of natural environment and recreation potential may be "lost" or fragmented though subdivision and development. Some existing and potential outdoor recreation areas are being threatened by incompatible land uses; such uses may be upstream or upwind from, or adjacent to, the boundaries of an outdoor recreation area. Conservation and recreation are not necessarily the most economically profitable of land uses; consequently, there are pressures to develop environmentally sensitive and/or valuable recreation areas.

(b) A rural municipality may not fully understand the need for regional outdoor recreation areas since many of its residents already live in a rural environment; often, it is the urban municipalities who "need" the extensive recreation areas but cannot supply them within their boundaries.

(c) Duplication, overuse or the "wrong" use of outdoor recreation areas may result when each municipality is looking after its own recreation needs; for example, since some outdoor recreation activities are incompatible with each other, it might be preferable for one municipality to provide for one type of activity while another municipality could provide for another type of activity that requires a similar environment. This Region is small enough, in terms of driving or even hiking distance, that any area can easily attract visitors from anywhere within the Region.

(d) As the Region becomes increasingly urbanized, it will be harder to preserve large tracts of natural environment; in order to continue providing extensive outdoor recreation opportunities, it will be important to have a regional system of trails linking recreation areas - such as lakes, wetlands, forests, historical/archaeological sites, unique topographic or geological features and so on.

(e) Each municipality, while determining its own recreation development priorities, might not take into consideration the priorities of the Region as a whole; therefore, a municipality might develop an outdoor recreation area that cannot be supported solely by local use, and yet does not appeal to regional users. Conversely, municipalities may develop recreation areas intended for local use, only to find the areas inundated with regional visitors.

(f) There may be the potential to amend existing programs so provincial or federal funding for outdoor recreation development may be forthcoming for a regional recreation system. It may be preferable, for example in terms of capital recreation grants, to priorize outdoor recreation areas at a regional scale, rather than at the local scale.

(g) Opportunities may exist for developing and promoting trails, tours or a series of recreation areas on a regional or provincial scale. Many local areas and attractions in the Region are not strong enough, individually, to attract tourists from outside the Region. However, an integrated regional recreation system could provide tourists with a wide variety of outdoor recreation opportunities in a wide variety of recreation areas.

(h) Many existing and potential conservation/recreation areas cross jurisdictional boundaries; what one municipality decides to do with "its" portion of a particular recreation area can have a major impact - positive or negative - beyond the municipality's boundaries.

As a regional agency, the Edmonton Metropolitan Regional Planning Commission is able to provide information and develop policy regarding outdoor recreation areas from a regional perspective. Therefore, the Commission has undertaken this Regional Outdoor Recreation Area study:

(a) to identify natural areas or corridors with existing or potential recreation value, which should be included in a regional outdoor recreation area system;

(b) to outline planning considerations and possible protective measures, including possible directions for regional policy, to ensure that outdoor recreation opportunities continue to be available to all residents of the Edmonton Region;

(c) to suggest general guidelines for the conservation, use and development of areas identified in the study; and

(d) to initiate or encourage discussion among the municipalities, the Commission, the Province and other agencies with respect to the provision of outdoor recreation opportunities at a regional scale.

II. Regional Outdoor Recreation Areas

1. Preamble

For most of the recreation activities considered in this study, the development of facilities is subordinate to the conservation of the natural environment. The recreation activities are: hiking, walking, cross-country skiing and snowshoeing, downhill skiing, nature study and observation, bird watching, boating and canoeing, power boating and water skiing, swimming, beach activities, mountain bike riding, snowmobiling, horseback riding, leisure driving, all-terrain vehicle (ATV) riding, bicycling, hunting, fishing, picnicking, "primitive" camping, full-facility camping, educational/interpretive activities involving nature and educational/interpretive activities involving history/culture/archaeology.[2]

These are activities which are enjoyed, to a large extent, because they occur in a natural environment. While not all are site specific, most require a certain type of environment for maximum enjoyment. Most, or all, of these activities could also occur in an urban setting, but the quality of the activity would be different. Therefore, the emphasis in this study is on conservation rather than development of those outdoor recreation areas included in the inventory.[3]

2. Classification of Outdoor Recreation Areas

The Edmonton Region has numerous natural areas, both large and small, of scenic and recreation value. These range from tiny bogs with unique natural habitats to extensive forested uplands with interesting topography, from large recreation lakes to scenic river valleys.

The areas included in the study:

(a) are already regionally significant because of existing use and development,

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[2] Downhill skiing, although requiring facility development, is very dependent on terrain, and suitable sites are limited.

Golfing is omitted because golf courses:
(i) are often private commercial ventures which can be, and are, developed almost anywhere, and
(ii) are developed in accordance with market demand; there is little concern with conservation or preservation, since golf courses are an artificial creation.

Similarly, many campgrounds and RV parks were not included in this outdoor recreation area inventory.

[3] No attempt was made to inventory recreation facilities such as sportsfields, arenas, playgrounds, etc. or tourist facilities such as hotels or restaurants unless the facilities were located in a recreation area included in this study. Such facilities are not normally dependent on a natural setting; in fact, facility development often requires draining, levelling and/or clearing of land before construction. Unless such development is occurring in an existing and/or potential outdoor recreation area, any environmental concerns would relate to health, safety and construction problems.

(b) have the potential to be regionally significant and require protection until the appropriate development can occur, and/or

(c) could be links or features of a future regional trail system.

An initial list of regional outdoor recreation areas was compiled from information supplied by the Region's municipalities. This list was then supplemented by referring to the Environmentally Sensitive Areas Study prepared for the County of Strathcona and the M.D. of Sturgeon[4]; the Canada Land Inventory maps; topographic maps and air photos; newspaper and magazine articles; information from Alberta Culture - Historical Resources Division and from Travel Alberta; recreation and tourist brochures and maps; trail guides; municipal plans and other documents; special studies; the Technical Appendix to the ***Edmonton Metropolitan Regional Plan***; and discussions with recreation board members from the Sturgeon Regional Recreation Board, the Counties of Strathcona, Parkland and Leduc and the City of Edmonton (see Appendix 1 for data sheets for each outdoor recreation area considered in this study and shown on Map 2). The draft report has been circulated to the nineteen municipalities in the Region plus the appropriate Provincial agencies. Changes to the inventory have been and continue to be made as comments are received.

Because this study is intended to provide a general inventory of outdoor recreation areas from a regional perspective, the information given for some areas is less than what is actually available. For example, the City of Edmonton has prepared or participated in a number of studies relating to the North Saskatchewan River Valley. To catalogue all the recreation facilities and opportunities available within the City's boundaries would not only constitute a separate study in itself but would, for the most part, duplicate work already carried out by the City's Recreation and Parks Department. Similarly, the County of Strathcona has completed an Outdoor Master Plan which details recreation opportunities available in the municipality.

An attempt was made to classify areas as to their local, regional or provincial significance in terms of recreation. However, a number of factors made this approach unworkable. In the first place, the criteria used to identify outdoor recreation areas in the Region are criteria that would apply to a regionally - and perhaps even provincially - significant recreation area. Secondly, there are a variety of criteria for assigning significance levels to outdoor recreation areas - criteria which may not be comparable from one area to another. For example, out of five lakes, one may attract users from all across Alberta because of its proximity to other recreation features; one may already be designated as a Provincial Natural Area or Provincial Park (although it may be used mainly by local residents); one may have outstanding topography, geological features, unique habitat, sensitive vegetation, wildlife and so on;

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[4] InfoTech Services, Land Evaluation Consultants. ***Environmentally Sensitive Areas: County of Strathcona and M.D. of Sturgeon.*** Technical Report prepared for the Edmonton Metropolitan Regional Planning Commission. Edmonton, March, 1989. (hereafter referred to as the E.S.A. Study).

one may have already been developed to accommodate use on a provincial scale; and one may have Class 1 or 2 CLI recreation capability, the highest capability for recreation use and development. All five lakes could be considered provincially significant.

Thirdly, visitor statistics for outdoor recreation areas range from in-depth to non-existent. Fourthly, this study was intended to identify both existing and potential outdoor recreation areas. An area which is already developed for some form(s) of outdoor recreation may attract users from all over the province, and could therefore be considered "provincially significant". However, it is difficult to foresee the recreational significance of a presently undeveloped sand dune area or slough. The eventual use or "significance" of any area will depend on many factors, including the amount and type of development, the recreation capability of the area, the demand for different types of recreation opportunities, the level of promotion, the availability of other areas to provide similar recreation opportunities and the area's potential to be part of a regional or provincial recreation system (which could consist of trails or nature areas, scenic drives or activity nodes, etc.).

Finally, it was considered premature, as part of an inventory, to designate any area as provincially significant without clarifying the Province's expected role in developing that area for recreation. Therefore, on Map 2 **(following page 10)**, the only areas designated as "provincial" are those which are considered so sensitive and unique that the Provincial Government should take action, for example:

(a) by declaring these areas as Provincial Environmentally Significant Areas,[5]

(b) by acquiring ownership of these areas, or

(c) by establishing policies and guidelines for the protection of these areas.

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[5] Provincial Environmentally Significant Areas are significant "...biological, palaeontological (fossil), archaeological or historical areas identified by regional planning commissions as needing protection or special development handling by municipal authorities." ***Environment Views***, Winter 1986. This is not a legislated term, although it has been recommended that the Province adopt such legislation.

Table 1
Regional Outdoor Recreation Areas

Map[a] Ref.	Recreation Area	Municipality(ies)
1.	Wizard Lake	County of Leduc and County of Wetaskiwin
2.	Pat O'Brien Park	Devon
3.	Rabbit Hill	County of Leduc
4.	Gwynne Channel	County of Leduc and County of Wetaskiwin
5.	Big Hay Lake	County of Leduc and County of Wetaskiwin
6.	Parc Quatre Saisons/Four Seasons Park	Beaumont
7.	Looking Back Lake and Joseph Lake	County of Leduc
8.	Ministik Lake and Oliver Lake	County of Leduc, County of Strathcona, County of Beaver and County of Camrose
9.	Hastings Lake (including South Hastings Ungulate Area, Parkland and Hastings Natural Areas and Sisib Lake)	County of Strathcona
10.	Cooking Lake and McFadden Lake	County of Strathcona
11.	North Cooking Lake Megablock and North Cooking Lake Natural Area	County of Strathcona
12.	Wanisan Lake	County of Strathcona
13.	Antler Lake	County of Strathcona
14.	Bennett Lake and Environs	County of Strathcona
15.	Trapper's Lake and Trapper's Lake Forest	County of Strathcona
16.	Half Moon Lake	County of Strathcona
17.	Half Moon Lake Meltwater Channel	County of Strathcona
18.	Polar Park	County of Strathcona
19.	Big Island Lake and Twin Island Lake	County of Strathcona
20.	Bretona Pond	County of Strathcona
21.	Boag Lake	County of Strathcona
22.	Baseline Slough	County of Strathcona
23.	Sherwood Park Natural Area	County of Strathcona
24.	Strathcona Science Park and Archaeological Centre	County of Strathcona
25.	Pointe Aux-Pins Soapholes	County of Strathcona
26.	Meander Scar and Oxbow Lake	County of Strathcona
27.	Astotin	County of Strathcona
28.	Northwest of Bruderheim Natural Area	County of Strathcona
29.	North of Bruderheim Natural Area	County of Strathcona
30.	Fort Saskatchewan Ski Hill	Fort Saskatchewan
31.	Redwater Sand Dunes (The "Pines")	M.D. of Sturgeon
32.	Coronado East and Lostpoint Lake	M.D. of Sturgeon
33.	Lily Lake Area	M.D. of Sturgeon
34.	Bon Accord North	M.D. of Sturgeon
35.	Manawan Lake	M.D. of Sturgeon
36.	Heritage Lake Park	M.D. of Sturgeon
37.	Cardiff Park	M.D. of Sturgeon
38.	Deadman Lake	M.D. of Sturgeon
39.	Sandy Lake and Calahoo Upland	M.D. of Sturgeon, County of Parkland and County of Lac Ste. Anne

Table 1 (Continued)

Regional Outdoor Recreation Areas

Map[a] Ref.	Recreation Area	Municipality(ies)	Recreation Area	Municipality(ies)
40.	Rivière Qui Barre Slough	M.D. of Sturgeon	• The North Saskatchewan River Valley	
41.	Villeneuve Gravel Pits	M.D. of Sturgeon	• The Sturgeon River Valley	M.D. of Sturgeon and St. Albert
42.	Gladu Lake and Gladu Lake Upland	M.D. of Sturgeon and County of Parkland	• The Redwater River Valley	M.D. of Sturgeon
43.	Big Lake	M.D. of Sturgeon, St. Albert, Edmonton and County of Parkland	• Rivière Qui Barre River	M.D. of Sturgeon
			• Willow Creek/Weed Creek Drainage System	County of Leduc
44.	Muir Lake	County of Parkland	• Conjuring Creek	County of Leduc
45.	Glory Hills	County of Parkland	• Blackmud/Whitemud Creek Drainage System	Edmonton and County of Leduc
46.	Hubbles Lake	County of Parkland		
47.	Wagner Natural Area (Wagner Bog)	County of Parkland	• Clearwater Creek	County of Leduc
48.	Devon Sand Dunes	County of Parkland	• Irvine Creek	County of Leduc
49.	University of Alberta Devonian Botanic Gardens	County of Parkland	• Mill Creek	Edmonton and County of Strathcona
50.	Clifford E. Lee Nature Sanctuary	County of Parkland	• Oldman Creek	County of Strathcona
51.	Capital City Recreation Park	Edmonton	• Pointe-aux-Pins Creek	County of Strathcona
52.	Connors Hill Ski Hill	Edmonton	• Ross Creek	County of Strathcona
53.	Snow Valley Ski Hill	Edmonton	• Astotin Creek	County of Strathcona
54.	Chickakoo Lake Recreation Area	County of Parkland		
55.	Telford Lake	Leduc and County of Leduc		
56.	Labyrinth Lake	County of Leduc and County of Wetaskiwin		
57.	Cawes Lake	County of Leduc and Edmonton		

Table 2
Historical and Cultural Sites

Map[a] Ref.	Historical/Cultural Site	Location
a.	Westlund House*	S.E. 20-49-27-W4th, County of Leduc
b.	Rumley Park (Proposed)	Calmar
c.	St. Michael's Roman Catholic Church	Leduc
d.	Knie House Museum	Leduc
e.	Leduc Oilfield Sign	County of Leduc (Calgary Trail)
f.	Calgary-Edmonton Trail Sign	County of Leduc (Calgary Trail)
g.	St. Vital Church	Beaumont
h.	Ministik School	N.W. 10-51-21-W4th, County of Strathcona
i.	Hamlet of North Cooking Lake	County of Strathcona
j.	Smeltzer House*	Sherwood Park
k.	Strathcona Archaeological Centre	Strathcona Science Park, County of Strathcona
l.	Partridge Hill United Church	Hamlet of Partridge Hill, County of Strathcona and Partridge Hill School
m.	Josephburg United Church*	Hamlet of Josephburg, County of Strathcona
n.	Fort Saskatchewan Northwest Mounted Police Post**	Fort Saskatchewan
o.	Fort Saskatchewan - Lamoureux Settlement Sign	Fort Saskatchewan
p.	Redwater Museum	Redwater
q.	Fort Augustus - Edmonton House Sign and Cairn	Lamoureux
r.	Notre Dame De Lourdes Roman Catholic Church	Lamoureux
s.	Athabasca Landing Trail Sign	North of Gibbons
t.	Emmanuel Anglican Church	Gibbons
u.	Sturgeon River Museum	Gibbons
v.	Sturgeon River Mill*	S.W. 32-55-23-W4th, M.D. of Sturgeon
w.	St. Emile Church and Rectory	Legal
x.	St. Jean Baptiste Church and Rectory and Notre Dame Convent**	Morinville
y.	Poundmaker Lodge**	N.E. 11-54-25-W4th, M.D. of Sturgeon
z.	Mission Hill**	St. Albert
a^1	Arden Place	St. Albert
b^1	Hamlet of Rivière Qui Barre	M.D. of Sturgeon
c^1	Stony Plain Multi-Cultural Centre**	Stony Plain
d^1	Iroquois Indians Sign	County of Parkland (Highway 16)
e^1	Andrew Wolf Wine Cellars	Stony Plain
f^1	Fort Edmonton	Edmonton
g^1	John Walters House Museum	Edmonton
h^1	Northern Alberta Pioneer Railway Museum	Edmonton
i^1	Leduc No. 1 Discovery Well	County of Leduc
*	Registered Historical Resource	
**	Provincial Historical Resource	

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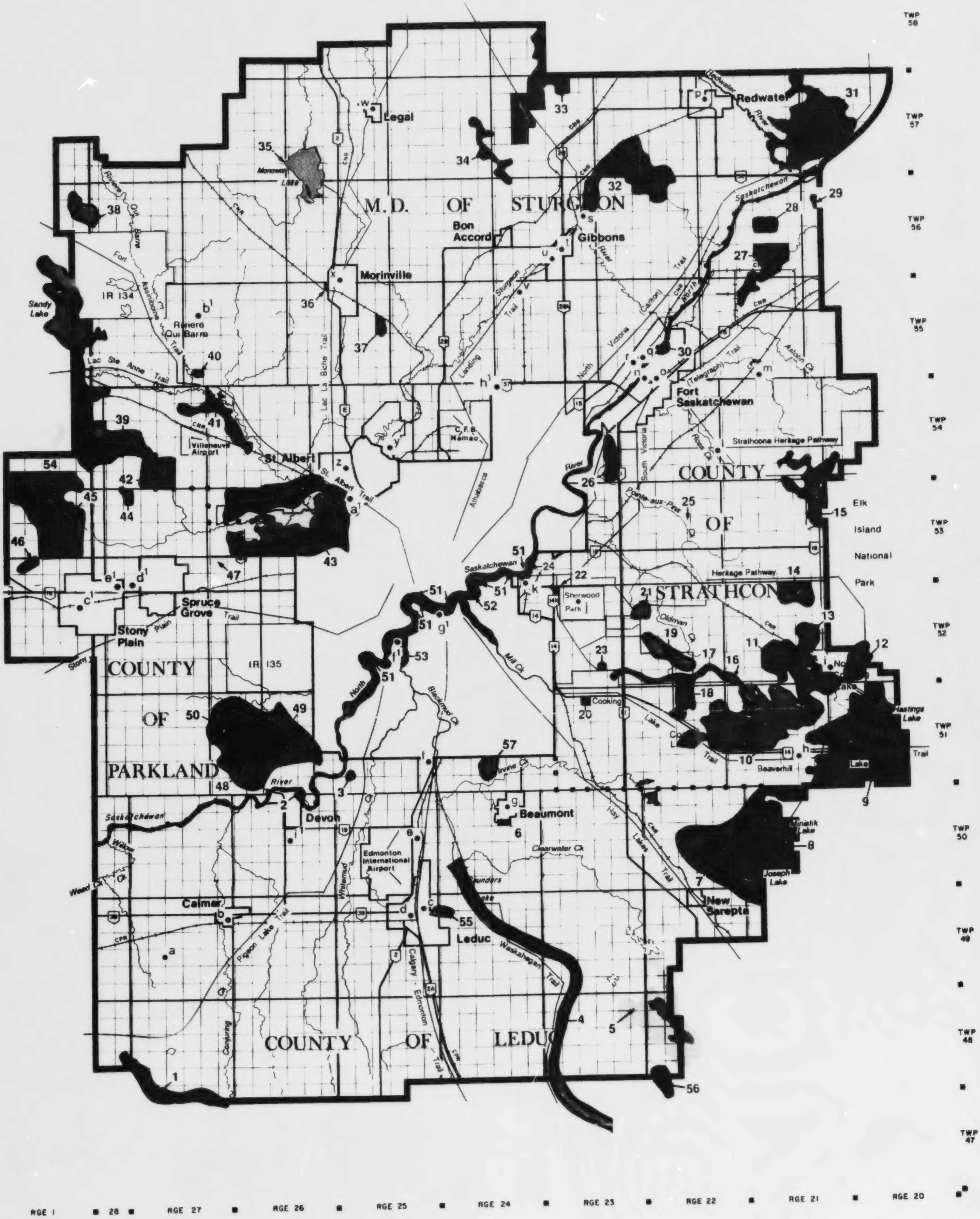
[a] Map Reference Numbers refer to Map 2, which follows page 10


M.D. OF STURGEON
COUNTY OF STRATHCONA
COUNTY OF PARKLAND
COUNTY OF LEDUC
Redwater
Legal
Morinville
Bon Accord
Gibbons
Fort Saskatchewan
St. Albert
Spruce Grove
Stony Plain
Devon
Beaumont
Calmar
Leduc
New Sarepta
Edmonton International Airport
Villeneuve Airport
C.F.B. Namao
Sherwood Park
Elk Island National Park
Sandy Lake
Hastings Lake
Cooking Lake
Miquelon Lake
Joseph Lake
IR 134
IR 135
Strathcona Heritage Pathway
Heritage Pathway
North Saskatchewan River
Sturgeon River
Redwater River
TWP 58
TWP 57
TWP 56
TWP 55
TWP 54
TWP 53
TWP 52
TWP 51
TWP 50
TWP 49
TWP 48
TWP 47
RGE 1
28
RGE 27
RGE 26
RGE 25
RGE 24
RGE 23
RGE 22
RGE 21
RGE 20

Map 2

Location of Outdoor Recreation Areas

▢ Areas Requiring Provincial Action and/or Ownership

■ Areas of Regional Significance (should be included in a Regional Recreation System)

40 Numbers correspond to Table 1

•b Historic or Cultural Site (Letters correspond to Table 2)

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The remaining outdoor recreation areas identified should be considered on a regional basis. These areas provide opportunities for different types and intensities of recreation activities. This study, therefore, attempts to identify existing and potential outdoor recreation areas that deserve attention at the regional as well as at the local level. In other words, none of these areas should be looked at in isolation. Not every one of these areas will be designated or remain a Conservation/Recreation area. However, when subdivision or development of any kind - recreation, residential, natural resource extraction, industrial, etc. - is proposed in or near one of these areas, the subdivision and/or development should be considered in terms of its effect on the total outdoor recreation area system. For example, construction of off-road vehicle trails in a particular "natural" area may be acceptable because similar types of environment are available in other parts of the Region for other incompatible recreation uses. CR development may be permitted along one lake while development on another, more environmentally sensitive, lake is prohibited. At the same time, the relatively few areas identified in the study as Conservation areas, rather than as Conservation/Recreation areas, are so unique and/or environmentally sensitive that any type of development (recreation or otherwise) should be severely restricted.

Each particular area considered in this study was chosen because:

(a) it involves a relatively large, relatively undeveloped area (e.g. the South Hastings Ungulate Area),

(b) it is rare or unique in terms of its topographic, geological, historical, archaeological, scenic or wildlife value (e.g. the Wagner Bog, the Pointe-aux-Pins Soapholes),

(c) it has good linkage potential or is itself a link between recreation areas (e.g. the North Saskatchewan River Valley, Conjuring Creek), and/or

(d) it has high (CLI Class 2 or 3) recreation capability, based on the Canada Land Inventory.

Area boundaries were determined in several ways:

(a) by using existing boundaries (for example, the boundaries of an established park);

(b) by using the boundaries of environmentally sensitive areas identified in the Environmentally Sensitive Areas Study (see Footnote 4);

(c) by using areas designated on the CLI maps for Recreation, Waterfowl or Ungulate capability;

(d) by using topographic features or contours; or

(e) by arbitrarily combining smaller areas into a larger area or dividing up a larger area into smaller areas (for example, to exclude intensive CR development).

Each area was examined in terms of the Canada Land Inventory (CLI) capability rating for recreation, waterfowl, ungulates and agriculture[6]; environmental sensitivity; uniqueness; area or length; topographic variation; vegetation; present uses; existing and potential linkages; special features; and other relevant factors such as access, land ownership and jurisdiction. Based on these factors, the areas were then divided into six categories:

(a) conservation areas,
(b) extensive recreation areas,
(c) extensive recreation areas for motorized vehicles,
(d) specialized outdoor recreation areas,
(e) intensive recreation areas,
(f) linear recreation areas (which overlapped with other categories).

Conservation Areas

Conservation Areas are specialized natural areas with:

(a) unique land-forms or geological features,
(b) unique or sensitive vegetation,
(c) CLI Class 1S waterfowl capability and/or
(d) CLI Class 3W ungulate capability.

Recreational use should be restricted to educational/interpretive activities and nature study/observation. Development should be limited to primitive trails or specially constructed (e.g. boardwalk) trails; signs, markers or other guides; viewing sites (such as blinds and platforms); and primitive campsites. Development could also include an interpretive centre.

The following areas outlined on Map 2 should be considered for designation as conservation areas: Wagner Natural Area (Wagner Bog - a unique habitat); Clifford E. Lee Nature Sanctuary; Pointe-aux-Pins Soapholes (a rare hydrogeological feature); Big Lake (especially the north and west shores which are Class 1S for waterfowl); Big Hay Lake and Manawan Lake (both Class 1S waterfowl lakes); parts of the North Saskatchewan River Valley; the lower reaches of the Weed Creek/Willow Creek drainage system; and the lower reaches of Conjuring Creek. The last three sites named are Class 3 winter range for moose, elk and deer.

Extensive Recreation Areas

Extensive recreation areas are large natural areas, generally over 20 hectares (50 acres), with:

(a) interesting and varied topography,
(b) predominantly natural vegetation,
(c) CLI Class 1, or perhaps Class 2, waterfowl capability,
(d) CLI Class 1, or perhaps Class 2, ungulate capability,
(e) CLI Class 4, Class 5, or perhaps Class 6, recreation capability.

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[6] See Appendix 2 for a brief discussion of the Canada Land Inventory capability rating system for recreation, waterfowl and ungulates.

Recreational use should involve such activities as hiking, snowshoeing, cross-country skiing, walking, canoeing and non-motorized boating, horseback riding, mountain biking, camping, nature observation, educational/ interpretive activities, hunting and fishing. The amount of development could vary, depending on the nature of each site, but should be limited to: a well-developed trail system for hiking, snowshoeing and cross-country skiing; some equestrian trails or mountain bike trails; picnic areas; washrooms; signs; water access for canoes and non-motorized boats; parking area; concession; seating/viewing areas; campgrounds with limited facilities; and an interpretive centre.

The following areas outlined on Map 2 should be considered for extensive outdoor recreation: Hastings Lake (including the South Hastings Ungulate Area, Sisib Lake, Parkland Natural Area[7] and Hastings Natural Area); part of the Glory Hills (including Chickakoo Lake Recreation Area); the Cooking Lake Megablock and North Cooking Lake Natural Area; Bennett Lake and its environs (Strathcona Wilderness Centre); Trapper's Lake and Trapper's Lake Forest; Wanisan Lake and the Cooking Lake - Blackfoot Grazing, Wildlife and Provincial Area; Oliver Lake, Ministik Lake and the north and east shores of Joseph Lake; Labyrinth Lake; the east end of Telford Lake; parts of Cooking Lake (the north shore including Collingwood Cove) and McFadden Lake; Sherwood Park Natural Area; North of Bruderheim Natural Area; the west shore and islands of Antler Lake; the south-east shore of Sandy Lake; Muir Lake; part of the Calahoo Upland; the south part of the Redwater Sand Dunes (the "Pines"); Coronado East and Lostpoint Lake; the Lily Lake Area; Bon Accord North; parts of the Devon Sand Dune Area (particularly in the vicinity of the Clifford E. Lee Nature Sanctuary); Boag Lake; and River Lot 56 Natural Area (near St. Albert).

Extensive Recreation Areas for Motorized Vehicles

Extensive recreation areas for motorized vehicles are medium-sized (e.g. 10 to 50 acres) natural areas or parts of larger natural areas reserved for the use of such recreation vehicles as snowmobiles, trail bikes or motor bikes, ATVs and motorboats. These areas have:

(a) varied and interesting terrain,
(b) largely natural vegetation,
(c) CLI Classes 3 to 7 waterfowl capability,
(d) CLI Classes 2 to 7 ungulate capability,
(e) CLI Classes 5 to 7 recreation capability (excluding lakes),
(f) in the case of rivers and lakes, sufficient water depth and surface area to accommodate motor boats safely.

Recreational use would involve such activities as: snowmobiling, riding/ racing trail bikes or motor bikes, riding ATVs, motor boating and waterskiing. Depending on the use, development could include: a well-developed trail system to accommodate motorized recreation vehicles safely.

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[7] When capitalized, "Natural Area" refers to a piece of land designated as a Provincial Natural Area.

all types of campgrounds, parking areas, boat launch or unloading facilities, pier, picnic areas, playground, washrooms, shelters, signs and other guideposts.

Those lakes on which motor boating is possible (see Map 2) include parts of Cooking Lake (especially the east and west ends and along the south shore), parts of Wizard Lake, Hubbles Lake, Joseph Lake, Looking Back Lake and Half Moon Lake. These lakes have Class 3 and/or Class 4 recreation capability, according to the CLI Recreation Capability Maps, with shoreland "... providing access to water suitable for popular forms of family boating." Although Sandy Lake and Muir Lake are also in this category, they are not considered suitable lakes for motor boats as they are significant fishing lakes.

The following land areas outlined on Map 2 may be suitable for motorized recreation vehicles: the Northwest of Bruderheim Natural Area (ATVs, mountain bikes, snowmobiles); parts of the Looking Back/Joseph Lake area (snowmobiles, trail bikes, ATVs); Gladu Lake Upland (snowmobiles, trail bikes, ATVs); the southern part of the Calahoo Upland (snowmobiles, trail bikes, ATVs, mountain bikes); the north part of the Redwater Sand Dunes (ATVs, mountain bikes); parts of the Devon Sand Dunes Area (ATVs, snowmobiles, mountain bikes); and the Big Island Lake/Twin Island Lake Area (snowmobiles).

Specialized Outdoor Recreation Areas

Specialized outdoor recreation areas are areas developed or reserved for a specific purpose but which are generally based on an "outdoor" environment (although the "natural" environment may be significantly altered, as in an urban park or formal garden, by the provision of facilities or by slope clearing). The actual area involved and the type and amount of development depend on the purpose of the site.

As shown on Map 2, existing specialized outdoor areas in the Edmonton Region include: Polar Park (wildlife preserve), Pat O'Brien Park in Devon (downhill skiing, golfing, hiking, cross-country skiing, etc.), Rabbit Hill (downhill skiing), the Devonian Botanical Gardens (nature study), Cardiff Park (golfing, fishing, formal park), Heritage Lake Park near Morinville (stocked fishing lake), Alberta Wildlife Park on Lily Lake (wildlife preserve), Strathcona Science Park (educational/interpretive activities), Parc Quatre Saisons/Four Seasons Park in Beaumont (urban park), Capital City Parks and Connors Hill ski hill (urban parks and downhill skiing), Snow Valley in Whitemud Ravine (downhill skiing), Fort Saskatchewan ski hill (downhill skiing), Baseline Slough in Sherwood Park (nature study, educational/interpretive activities), Bretona Pond and Cawes Lake (waterfowl viewing) and provincial, municipal and private campgrounds (not shown on the map).

Other sites which could be designated and developed as specialized outdoor recreation areas are: Cardiff Mine, Villeneuve Gravel Pits, the Oxbow Lake and Meander Scar south-west of Fort Saskatchewan and Gladu Lake Upland (educational/interpretive activities); Deadman Lake, Antler Lake Islands

Natural Area and Rivière Qui Barre Slough (nature study and educational/interpretive activities); and Red Willow Park in St. Albert (a proposed urban park with trails, interpretive centre, etc.).

Intensive Recreation Areas

Intensive recreation areas are specialized natural areas which have a high capability for intensive recreation use and development. Such areas are usually associated with waterbodies which provide opportunities for boating, swimming, beach activities and possibly fishing. These areas have:

(a) CLI Classes 2 and 3, and perhaps Class 4, recreation capability[8],
(b) interesting and varied topography, depending on the use,
(c) some natural vegetation.

These areas are not necessarily associated with low waterfowl and/or ungulate capability. However, as shown on Map 2, there are very few areas in the Edmonton Region with Class 3 recreation capability. Half Moon Lake has Class 3 and 4 recreation capability for family boating, recreation lodging, beach activities (including swimming) and wildlife viewing. Cooking Lake, the largest recreational lake in the Region, has several Class 3 and Class 4 recreation areas including North Cooking Lake, South Cooking Lake, Lakeview and a Class 3 beach area along the south shore. Recreation opportunities include beach activities, swimming, family boating and recreation lodging. The north and south shores of Wizard Lake (including Jubilee Park, a Class 3 beach area) provide opportunities for beach activities, swimming, family boating, deep water boating and recreation lodging. Portions of the south-east, east and west shores of Sandy Lake are designated Class 3 for such recreation activities as recreation lodging, swimming, family boating, angling and beach activities. Intensive recreation development is proposed for the west end of Telford Lake, within the City of Leduc boundary.

Muir Lake, north of Spruce Grove, is a Class 3 recreation lake with opportunities for recreation lodging, family boating and angling. However, because of its reputation as a fishing lake and present lack of development, Muir Lake is not included in the suggested list of intensive recreation areas. The lake may be capable of accommodating more intensive use and development in terms of extensive recreation than other extensive outdoor recreation areas.

Linear Recreation Areas

Linear recreation areas are linear topographic features or man-made trails which serve as links between two or more recreation areas and/or are themselves recreation areas. Within the Edmonton Region, there are three types of linear recreation areas:

(a) natural linear features (such as rivers, streams and glacial meltwater channels) with interesting or varied topography, preferably natural vegetation and opportunities for viewing wildlife;

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[8] There are no areas with Class 1 recreation capability in the Edmonton Region.

(b) existing and proposed trails with interesting or varied topography, preferably natural vegetation and/or interesting surroundings and, depending on the purpose of the trail, opportunities for observing wildlife;

(c) historic trails/pioneer travel routes, usually radiating out from Edmonton, often following natural linear features, trails or roads, and often in conjunction with designated or potential historic sites.

Recreational activities would include one or more of the following: hiking, snowshoeing, cross-country skiing, mountain bike riding, horseback riding, snowmobiling, educational/interpretive activities, nature study and observation, leisure driving (where roads follow a linear feature), canoeing, boating, walking and bicycling.

The level of development will depend on whether part or all of the linear recreation feature is considered a conservation area (e.g. the lower reaches of Willow Creek), an extensive recreation area (e.g. Pointe-aux-Pins Creek), an extensive recreation area for motorized vehicles (e.g. the Gwynne Channel), a specialized outdoor area (e.g. Snow Valley downhill ski area in Whitemud Ravine) or an intensive recreation area (parts of the proposed Strathcona Heritage Pathway). Development would normally include a well-developed trail system for hiking, snowshoeing, walking and cross-country skiing and may also include equestrian, bike, mountain bike and snowmobile trails or a scenic road.

As shown on Map 2, there are a number of linear features in the Edmonton Region. The most outstanding topographic feature is the North Saskatchewan River Valley. Other features considered, and in some instances already being used, as linear recreation areas are: the Sturgeon River Valley, the Gwynne Channel and Half Moon Lake Meltwater Channel (glacial meltwater features), the Willow Creek/Weed Creek drainage system, Conjuring Creek, the Redwater River Valley, Pointe-aux-Pins Creek, Astotin Creek, the Blackmud/Whitemud Creek drainage system, Mill Creek, Rivière Qui Barre River, Oldman Creek, Irvine Creek and Clearwater Creek.

Water courses make good links between recreation areas, even when they themselves are not particularly outstanding recreation features. For example, Conjuring Creek provides a direct link between Wizard Lake and the North Saskatchewan River Valley, although for much of its length the watercourse is a minor dip in the landscape. Relatively speaking, in a flat agricultural landscape, watercourses tend to be a prominent physical feature. Most trees and shrubs which remain after clearing for agriculture follow the watercourses; this in turn makes the stream banks better habitat and travel corridors for wildlife. In some cases, environmental reserve (ER) or municipal reserve (MR) can be taken along a creek when subdivision occurs. Furthermore, trails following a watercourse would tend to skirt planted areas, thereby avoiding crop damage. Finally, rivers and streams criss-cross the Edmonton Region and provide opportunities for recreation corridors between municipalities and recreation areas.

A number of trail systems are partially completed or proposed. The Waskahegan Trail follows Blackmud Creek, the Gywnne Channel and Ross Creek, and will eventually parallel the Sturgeon River. Edmonton's Capital City recreation trail system provides miles of hiking and bike paths and links a number of urban parks. A major feature of the proposed Red Willow Park in St. Albert is a system of trails and scenic roads along the Sturgeon River. The proposed Strathcona Heritage Pathway will eventually tie in with trail systems in both Edmonton and Fort Saskatchewan; the Pathway will be primarily a bike route. Trails already exist along the North Saskatchewan River but will be extended as recreation development continues. The M.D. of Sturgeon and the Town of Gibbons have adopted a joint area structure plan for the Sturgeon River Valley, which includes a trail system.

With the exception of the Athabasca Landing Trail, which is being developed as a conservation/recreation trail corridor, the historic trails in the Edmonton Region are barely recognizable. The St. Albert Trail and Highway 2A follow the old St. Albert Trail and Calgary-Edmonton trail, respectively. Other historic trails were the North Victoria (Carlton) and South Victoria (Telegraph) Trails which ran north-east from Edmonton along the North Saskatchewan River; the Hay Lakes, Beaverhill Lake and Cooking Lake Trails which ran south-east from Edmonton to their respective namesake lakes; the Lac La Biche Trail which connected Edmonton, St. Albert, Morinville and Legal with points further north; the Fort Assiniboine Trail which followed Rivière Qui Barre River and the Lac Ste. Anne Trail which followed the Sturgeon River westward; the Stony Plain Trail which ran south-west, south of Spruce Grove and Stony Plain; and the Pigeon Lake Trail which ran south-west from Edmonton to Pigeon Lake. In some instances, there are signs or cairns noting these trails. Perhaps portions of these pioneer routes could be "revitalized" as linear recreation features, particularly in conjunction with designated or potential historic sites.

3. Historical and Cultural Sites

Historical and cultural sites are special areas of historical, cultural and/or archaeological interest. Recreational use is primarily for educational/interpretive activities. The type and amount of development will depend on each site but could include: picnic areas, an interpretive centre, washrooms, campground, parking area, concession/gift shop, playground, signs, plaques and guide-posts.

Although historical and cultural sites are not usually outdoor recreation areas, they may be incorporated as interesting and attractive features along a trail or road system, or as part of a larger outdoor recreation area. The following is a partial list of historical and cultural sites that could be taken into consideration when various recreation trails or areas are developed.

The City of Edmonton has many interesting historic and cultural sites in the North Saskatchewan River Valley, including Fort Edmonton and the John Walters Museum. There are a number of designated historic sites in the Edmonton Region: Mission Hill in St. Albert, St. Jean Baptiste Church and Rectory and the Notre Dame Convent in Morinville, the Poundmaker Lodge near St. Albert, the Sturgeon River Mill south of Bon Accord, the Stony Plain Multicultural Centre, Josephburg United Church, the Northwest Mounted Police Post in Fort Saskatchewan, Smeltzer House in Sherwood Park, and the Westlund House south-west of Calmar. In addition, there are several signs and/or cairns commemorating Fort Augustus/Edmonton House, Fort Saskatchewan/Lamoureux Settlement, the Calgary-Edmonton Trail, the Leduc Oilfield, the Athabasca Landing Trail and the presence of Iroquois Indians in the Region.

As shown on Map 2, there are a number of potentially historic or culturally interesting sites/buildings in the Edmonton Region. Beautiful older churches are focal points in communities such as Beaumont (St. Vital's), Legal (St. Emile Church and Rectory), Gibbons (Emmanuel Anglican), Partridge Hill (Partridge Hill United), Lamoureux (Notre Dame de Lourdes) and the City of Leduc (St. Michael's). Numerous interesting churches of different denominations are located in the rural areas and hamlets. The Hamlets of North Cooking Lake and Rivière Qui Barre contain a number of historic commercial and residential buildings. Ministik School south of Cooking Lake has been proposed as an historic site.

Existing and proposed museums or architecturally interesting buildings could also become greater attractions along a trail and/or road system. Gibbons, Leduc and Redwater have pioneer museums. The Northern Alberta Pioneer Railway Museum is located in North Edmonton. In Calmar, a proposed agricultural museum park is taking shape while the County of Leduc is developing an interpretive centre associated with Leduc No. 1 Discovery Well, south of Devon. Interesting modern buildings include Arden Place in St. Albert and the Andrew Wolf Wine Cellars in Stony Plain.

There are a number of archaeological sites in the Edmonton Region, but the most accessible is located at the Strathcona Archaeological Centre in Strathcona Science Park.

III. General Planning Considerations

The identification of existing and potential outdoor recreation areas is an important first step in establishing a regional outdoor recreation system. Providing some measure of protection for these areas, especially those not currently designated for recreation or conservation, is essential. One way of protecting recreation/conservation areas is through legislation. Some legislation is already in place at the federal, provincial, regional and local levels; this legislation could, in many cases, be strengthened.

Before the Regional Plan, general municipal plans, area structure plans, etc. are reviewed or amended, there are a number of planning considerations which should be taken into account.

1. Land Fragmentation

Many areas of interesting and varied topography (e.g. the Glory Hills, the Cooking Lake Moraine, the Devon Sand Dunes) are presently zoned for multiple-parcel country residential (CR) development, partly by default. In most cases, the land zoned for CR development is rated Class 4 to 7 (Canada Land Inventory) in terms of agricultural capability; subdivision of better agricultural land (CLI Classes 1 to 3) for CR development is generally prohibited. This means that many of the extensive areas of interesting and varied topography (attractive residential settings), often associated with lakes, sloughs and remnant forests, are being fragmented into small parcels for individual private residences. In these areas, efforts should be made to preserve large tracts of land or wide corridors for extensive recreational use.

2. Municipal and Environmental Reserves

Efforts should be made, when subdivision occurs in the areas identified, to accumulate large tracts of Municipal Reserve (MR) or wide "corridors" of MR to accommodate outdoor recreation activities. As much as possible, municipal reserve should be taken adjacent to Crown or municipal land, watercourses, lakes and sloughs and other areas of topographic, vegetational and/or wildlife interest.

Environmental Reserve (ER) should be taken, whenever possible under the present legislation, in or near areas identified as conservation and/or recreation areas.

When subdivision occurs in areas where MR could be acquired but most or all of the MR allowed is not required, cash in lieu should be taken, and used to acquire land within identified outdoor recreation areas.

3. Remnant Forest Areas

As much as possible, remnant forest areas should be preserved since so much of the Region has been cleared for agricultural and residential purposes. Forested areas are not only more pleasant for most types of outdoor recreation, they also provide necessary wildlife habitat.

4. Representative Ecological Reserves

Consideration should be given to establishing a system of "ecological reserves" similar to Provincial Ecological Reserves.[9] These ecological reserves would preserve representative samples of ecosystems in the Edmonton Region, such as a sand dune area, a "knob and kettle" area, an aspen poplar wood, a parkland preserve or a series of sloughs. As with the provincial reserves, recreation activities would be passive, relating to education and interpretation. Hunting, fishing or active recreation would be prohibited.

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[9] Ecological Reserves "... preserve representative examples of Alberta's ecosystems. Activities relating to education, interpretation and scientific research will be allowed, but not hunting, fishing or active recreation." - ***Environment Views***, Winter, 1986.

5. *Conservation Areas*

Conservation areas should be well protected, with a minimum amount of development allowed; the number of CLI Class 1S waterfowl lakes and CLI Class 3 winter range lands for ungulates in the Region is limited. Many of these areas could be regionally significant for a limited range of recreation activities.

6. *Lake Shorelands*

As much as possible, the best beach areas on lakes should be kept for public use since:

(a) Class 3 beaches are rare in the Region,
(b) Class 3 beaches can generally accommodate more people than a cottage subdivision can hold, and
(c) private cottage owners can use a public beach whereas the general public cannot or will not use a private beach or a beach perceived to be private (e.g. because of restricted access).

Where a shoreland area is Class 3 or 4 for "recreation lodging," cottage subdivisions should be designed to allow maximum public access to beach areas which are Class 3 or 4 for swimming, family boating, beach activities, etc.

7. *Watercourses*

In agricultural areas, the valleys of rivers, streams and even intermittent streams may provide the only topographic relief. Furthermore, watercourses are often associated with linear stands of trees and shrubs. As much as possible, these linear features should be preserved as recreation and wildlife habitat corridors - not only for their recreational value but as potential links in a regional trail system. These features provide opportunities for trails that are often not directly on good agricultural land and which border, rather than cut through, pastures and field crops.

8. *Trails*

It is apparent that four types of trail use are popular. However, these four types are not really compatible:

(a) hiking, snowshoeing, walking and cross-country skiing tend to be quiet, relatively slow-moving activities;

(b) mountain bike riding and bicycling are speedier activities and, in the case of bicycling, require certain trail construction standards;

(c) ATV, motorbike/dirt bike and snowmobile riding are fast, noisy activities which can have a detrimental effect on a trail and its environs; and

(d) horseback riding can be incompatible with other types of trail use because of horse droppings and because the animals can be easily startled.

In order to accommodate all four uses, a regional recreation system could:

(a) provide parallel trail systems constructed for different types of use (e.g. as in parts of the Mill Creek Ravine trail system);

(b) create separate areas for different types of use (e.g. as in the Chickakoo Recreation Area, where off-road vehicles and snowmobiles are prohibited);

(c) reserve parallel watercourses for different types of trail use (e.g. using the Pointe-aux-Pins watercourse as a nature trail and the Oldman watercourse as a mountain bike or equestrian trail); or

(d) divide trails with, for example, walking on the left and cycling on the right (e.g. as in parts of the Capital City trail system).

It may not be possible for each municipality to provide for all trail uses as listed above. However, the Region as a whole does have the necessary amount and variety of open space to provide opportunities for various types of regional trails.

9. Theme Trails or Roadways

There is great potential for several "theme trails" or drives in the Edmonton Region, such as "Hiking through History" or "A Look at Nature". Sites which may not be significant attractions on their own could be important features of a regional trail or road system.

10. Public Paths

Consideration should be given to establishing a "public path" system, similar to the one in Britain. This might be easier to accomplish if proposed trails followed river valleys and watercourses, abandoned railway lines or other linear features whenever possible. This might also be easier to accomplish when requests for easements or rights-of-way are made to landowners as part of a recognized regional trail system rather than on behalf of a relatively unknown organization. The Waskahegan Trail Association, for the Waskahegan Trail, obtained permission from many landowners to cross or use their land. A regional "public path" or "right-of-way" policy could be established which deals with, among other things, the criteria used to choose the path, the protective measures required, the compensation or other "trade-offs" to private landowners and the use of public land.

IV. Implementation

1. Implementation at the Provincial Level

(a) Policy and Legislation

The outdoor recreation areas identified in this study are considered to have at least regional significance, either on their own or as part of a larger system. A few, particularly sensitive areas are considered to have provincial significance; that is, it is felt that the Province has an active role to play in the protection of these areas. Five natural areas[10] are recommended for designation as Provincial Environmentally Significant Areas.[11] The recommended areas are partly or wholly Crown land but their present designation (e.g. Wagner Provincial Natural Area) may not be sufficient for the strict conservation measures required. Furthermore, these areas should be studied both in detail and in the context of their surroundings to ensure that conservation efforts are not negated by activities outside the conservation area boundaries.

Provincial Natural Areas fall into two categories: designated (i.e. established by Order-in-Council) and non-designated or candidate Natural Areas. Site management of Natural Areas is the responsibility of the Public Lands Division, Alberta Forestry, Lands and Wildlife, with input from local planning agencies. For purposes of policy and management, Provincial Natural Areas are divided into Conservation, Recreation or Education Natural Areas; a management plan for any particular Natural Area would emphasize one of these three aspects. Non-designated or candidate Natural Areas are frequently given some provincial protection through a Protective Notation (PNT). This is a protective mechanism which can be applied by a provincial agency (e.g. Forestry, Lands and Wildlife; Alberta Environment) to "flag" particular parcels of public land where there are environmental concerns. The agency responsible for placing a Protective Notation on a parcel of land must be notified of any proposed change in land use or disposition. That agency can then place restrictions, as necessary, on the proposed land use or disposition. Protective Notations can be placed for many reasons - environmental, recreational, ecological, etc. Often this protective mechanism is used in places where there is sandy soil, rough topography, steep slopes, a flooding hazard or high waterfowl production; often, land use in these areas is restricted to grazing or hay production. Protective Notations may also be placed on public land with recreational site potential (i.e., public lands with the potential for more intensive, facility-oriented recreation development) or to ensure public access to public recreation areas.

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[10] Big Hay Lake, Manawan Lake, parts of Big Lake, the Pointe-aux-Pins Soapholes and the Wagner Bog

[11] "Significant biological, palaentological (fossil), archaeological or historical areas identified by regional planning commissions as needing protection or special development handling by municipal authorities" - ***Environment Views,*** Winter, 1986.

Crown land is frequently leased for grazing, natural resource extraction, recreation, etc. Organizations, including such recreation and conservation agencies as the Waskahegan Trail Association and Ducks Unlimited Canada, can obtain a Licence of Occupation (LOC) on public lands. An LOC is a disposition usually given for access roads and trails. Unlike a lease, an LOC cannot restrict public access to the road or trail. A lease normally covers a large area of land, such as a legal subdivision (LS) or a quarter section; an LOC is normally for a "corridor".

As mentioned, environmental reserve is one means of reserving natural areas for future conservation/recreation use. However, the definition of "environmental reserve" (ER), as given in Section 98 of the Planning Act, R.S.A, 1980, is very narrow. The legislation will need to be amended to provide subdivision approving authorities with more flexibility and authority to designate ER. The Public Lands Division of Alberta Forestry, Lands and Wildlife is currently investigating ways to minimize problems (such as maintenance) with existing environmental reserves.

Restricted Development Areas (RDAs) require ministerial approval for subdivision, development or land disturbance to take place. RDAs have not been included in this study, except the North Saskatchewan River Valley RDA, as those outside the river valley are primarily intended to preserve land for future utility and transportation corridors. However, this primary use does not rule out the possibility of recreation as a secondary use. The RDA which encircles Edmonton provides a unique opportunity for a "ring" trail or bikeway system with links to the North Saskatchewan River Valley, the Blackmud/Whitemud Creek Drainage System (and the Waskahegan Trail), Mill Creek, Big Lake and the Sturgeon River Valley, the proposed Strathcona Heritage Bike Pathway, among others.[12] Municipalities should work with the Provincial Government in seeking ways to provide recreation opportunities within the RDA while recognizing the RDA's primary function as a utility/transportation corridor.

(b) Development

The Province, through such departments as Alberta Recreation and Parks, Alberta Forestry, Lands and Wildlife, Alberta Tourism, etc., is directly involved in the management and development of recreation uses on public lands and in provincial parks.

Perhaps, in future, the existing provincial parks, Provincial Natural Areas and other public lands with recreation potential identified in this study could be incorporated into a regional outdoor recreation areas system. This could allow greater input at the regional level on management and development of these areas and encourage co-ordination of recreation use and development in provincial, municipal and private outdoor recreation areas.

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[12] Use of the RDA as part of a proposed equestrian/multi-use trail from Drayton Valley to Fort Saskatchewan has been discussed. The trail, with associated equestrian centres and staging areas, is intended to follow the North Saskatchewan River Valley. A master plan for the Drayton Valley to Edmonton and Edmonton to Fort Saskatchewan segments is being prepared. However, within Edmonton's boundaries, existing and proposed development, together with user pressure for a wide variety of outdoor recreation activities in the River Valley, make development of a continuous equestrian trail unlikely. It has been suggested that the existing transportation/utility RDA which "rings" the City could provide the link between the east and west segments of the trail.

2. *Implementation at the Regional Level*

(a) Policy

The Edmonton Metropolitan Regional Planning Commission has a mandate to consider outdoor recreation areas from a regional perspective. Through the Regional Plan, the Commission has a direct role to play in the designation and protection of regional outdoor recreation areas. The present (1984) Regional Plan includes a series of policies on the Natural Environment (Sections 7.0 and 8.0) providing guidelines for municipalities in the preparation of local statutory plans and by-laws. The existing Regional Plan Policy Reference Map conceptually illustrates as Nature Conservation and Recreation "... those areas of the Region which should be conserved for their environmental values, their natural and scenic attributes and their potential for wildlife habitat," as well as areas "...which have the potential for outdoor recreation use." The Regional Plan is currently under review. Perhaps a revised Regional Plan could:

(i) include a greater number and variety of outdoor recreation areas which are, or could be, of regional significance; and

(ii) provide the Commission with a stronger role in designating and conserving regional outdoor recreation areas.

Many of the outdoor recreation areas identified in this inventory require some measure of protection to preserve their environmental and recreational value. The Regional Plan could provide a certain level of protection. Outdoor recreation areas fall into three broad categories: Nature Conservation Areas, with the emphasis on conservation of the natural environment; Conservation/Recreation Areas, with the emphasis on recreation in a natural environment; and Recreation Areas, where the natural environment is modified to a greater or lesser extent to accommodate recreation uses (e.g. a downhill ski area).

In Nature Conservation Areas, Regional Plan policies could restrict, or in some cases prohibit, development. Generally speaking, development would be associated with interpreting, and minimizing damage to, the natural environment. In Conservation/Recreation Areas, the level of development should relate to environmental sensitivity and wildlife capabilities; existing development; potential use in comparison with other, similar sites; recreational capability; and the impact of non-recreational land uses on recreational use and potential. Therefore, the Regional Plan could provide policy guidelines with respect to: the requirements for an outline plan, management plan or area structure plan (ASP); requirements for an environmental impact assessment (EIA); municipal and environmental reserves; subdivision and development on lake shoreland, along watercourses, in and around wetlands, and in remnant forests; and buffering between recreation uses and other land uses.

The Regional Plan could also include policies with respect to land uses adjacent to Nature Conservation Areas, as well as land uses which would have a significant impact on the environmental or recreational quality of a Conservation/Recreation Area.

(b) Development

At the present time, the provision of outdoor recreation opportunities is the responsibility of individual municipalities (through their recreation boards, public works, volunteer groups, etc.) or of sub-regional recreation boards. Other groups, such as the Waskahegan Trail Association, can be responsible for a specific project or type of recreation use.

However, the implementation of a regional outdoor recreation areas system could be co-ordinated through a regional agency. If management, protection and development of outdoor recreation areas were to occur at a regional level, it would require a board or agency with a regional mandate to analyze regional recreation demands, establish priorities for conservation and development, make "trade-offs" where necessary, establish protective measures, negotiate easements or rights-of-way especially where these cross municipal boundaries and provide a forum for co-ordinating provincial, municipal and private efforts.

Finally, a regional agency such as the Regional Planning Commission or a regional recreation authority could prepare an outdoor recreation master plan for the Edmonton Region.

3. Implementation at the Municipal Level

(a) Policy

Amendments to the Regional Plan should be reflected in municipal statutory plans and by-laws. General municipal plans (GMPs) should provide the overall concept of the areas designated as Nature Conservation Areas or Conservation/Recreation Areas in the Regional Plan. A GMP policy, stating that MR and ER would be requested whenever possible in these areas, should be included. GMPs could also identify those areas requiring a management plan, an area structure plan or a special study.

GMP policy is implemented largely through the municipal land use by-law (LUB). In an LUB, municipalities could designate appropriate land use districts or special areas for those areas identified in the Regional Plan and the GMP as Nature Conservation Areas or Conservation/Recreation Areas. The LUB could also provide more detailed regulations (such as permitted and discretionary uses) for these areas.

Area structure plans, management plans and special studies are important tools in planning for Conservation/Recreation Areas. In most cases, large tracts of land (e.g. several quarter sections) will not be reserved entirely for recreation, or one type of recreation. More detailed plans and studies should outline the location of and relationship between different types of use within a Conservation/Recreation Area. For example, if part of an area is to be used for off-road vehicles, that use should be separated from an environmentally sensitive habitat or landform feature. If CR development is allowed, it may be important to "reserve" MR "corridors", access to lakes or potential trail locations along watercourses. Such considerations are too detailed for the GMP and LUB, and may require area-specific studies.

(b) Development

Municipalities are directly involved in the development of outdoor recreation areas. If a regional outdoor recreation areas system were established, municipalities should work together (and with a regional recreation authority, if one were established) to:

(i) decide which of the areas as identified are best suited for which types of recreation activities;

(ii) prepare joint studies or plans where necessary (for example, where a river crosses several municipalities or a proposed recreation area straddles two or more municipal boundaries);

(iii) priorize outdoor recreation areas and associated recreation development on a regional basis;

(iv) increase public awareness of the recreational opportunities available throughout the Region;

(v) negotiate with landowners regarding easements, rights-of-way, land acquisition and compensation; and

(vi) co-ordinate the acquisition of MR and ER across municipal boundaries.

To be effective, a regional outdoor recreation areas system will require cooperation at all levels, from provincial government departments to private landowners.

V. Conclusions

A number of observations and conclusions can be drawn from this study. These are summarized below:

1. Within the Edmonton Region, there are still many "natural" areas which are, or could be, used for outdoor recreation activities. Wetlands, sand dune areas, remnant forests, remnant parkland, river valleys and watercourses offer numerous opportunities for activities ranging from birdwatching to downhill skiing.

2. Some of these areas have been recognized and are now developed for recreation; some have been provided with a measure of protection with respect to conservation; some have only recently been identified; and some are threatened by development, overuse or "misuse".

3. The population of the Edmonton Region is growing and the level of urbanization is increasing. At the same time, the demand for recreational activities in a natural or semi-natural environment continues to grow.

4. The type of outdoor environment required often depends on the type of activity, and can range from basically untouched, undeveloped conservation areas, through large tracts of partly developed land to highly developed recreation centres with specialized facilities.

5. There are numerous outdoor recreation activities, many of which are not compatible.

6. Existing and potential outdoor recreation areas are not evenly distributed throughout the Region.

7. There seems to be the need to assess the protection and/or development of any outdoor recreation area (existing or potential), not just on the basis of its own capabilities, but in the context of what is available throughout the Region. For example, ninety percent of the areas identified in this inventory may have excellent potential for hiking and cross-country skiing; yet if all ninety percent were developed for these two activities, other uses, such as horseback riding, ATV riding, mountain biking or birdwatching, might be precluded from the Region. Some environmentally sensitive areas are being used for activities which might be more suitable in similar, but less sensitive, areas. Some areas appear to have excellent potential for certain recreational activities, but will be developed for non-recreational uses before their potential can be realized.

8. At the present time, protection and/or development of outdoor recreation areas in the Edmonton Region is the concern of the Province, the Regional Planning Commission, subregional planning boards, municipalities and private organizations and individuals.

9. Individuals, organizations and municipalities are realizing that protection and/or development of outdoor recreation areas requires more than local efforts.

10. At the present time, there is no formal means of co-ordinating protection and/or development of outdoor recreation areas throughout the Edmonton Region.

11. It is time to consider outdoor recreation areas from a regional perspective. Therefore, this inventory could be considered the first step in the development of a regional outdoor recreation areas system for the Edmonton Metropolitan Region.

Appendix 1
Regional Outdoor Recreation Areas

Data Sheets

MAP 2 REFERENCE NUMBER	REGIONAL OUTDOOR RECREATION AREAS
1.	Wizard Lake — County of Leduc and County of Wetaskiwin
2.	Pat O'Brien Park — Devon
3.	Rabbit Hill — County of Leduc
4.	Gwynne Channel — County of Leduc and County of Wetaskiwin
5.	Big Hay Lake — County of Leduc and County of Wetaskiwin
6.	Parc Quatre Saisons/Four Seasons Park — Beaumont
7.	Looking Back Lake and Joseph Lake — County of Leduc
8.	Ministik Lake and Oliver Lake — Counties of Leduc, Strathcona, Beaver and Camrose
9.	Hastings Lake (including South Hastings Ungulate Area, Parkland and Hastings Natural Areas and Sisib Lake) — County of Strathcona
10.	Cooking Lake and McFadden Lake — County of Strathcona
11.	North Cooking Lake Megablock and North Cooking Lake Natural Area — County of Strathcona
12.	Wanisan Lake — County of Strathcona
13.	Antler Lake — County of Strathcona
14.	Bennett Lake and Environs — County of Strathcona
15.	Trapper's Lake and Trapper's Lake Forest — County of Strathcona
16.	Half Moon Lake -- County of Strathcona
17.	Half Moon Lake Meltwater Channel — County of Strathcona
18.	Polar Park — County of Strathcona
19.	Big Island Lake and Twin Island Lake — County of Strathcona
20.	Bretona Pond — County of Strathcona
21.	Boag Lake — County of Strathcona
22.	Baseline Slough — County of Strathcona
23.	Sherwood Park Natural Area — County of Strathcona
24.	Strathcona Science Park and Archaeological Centre — County of Strathcona
25.	Pointe-aux-Pins Soapholes — County of Strathcona
26.	Meander Scar and Oxbow Lake — County of Strathcona
27.	Astotin — County of Strathcona
28.	Northwest of Bruderheim Natural Area — County of Strathcona
29.	North of Bruderheim Natural Area — County of Strathcona
30.	Fort Saskatchewan Ski Hill — Fort Saskatchewan
31.	Redwater Sand Dunes (the 'Pines') — M.D. of Sturgeon
32.	Coronado East and Lostpoint Lake — M.D. of Sturgeon
33.	Lily Lake Area — M.D. of Sturgeon
34.	Bon Accord North — M.D. of Sturgeon
35.	Manawan Lake — M.D. of Sturgeon
36.	Heritage Lake Park — M.D. of Sturgeon
37.	Cardiff Park — M.D. of Sturgeon
38.	Deadman Lake — M.D. of Sturgeon
39.	Sandy Lake and the Calahoo Upland — M.D. of Sturgeon, County of Lac Ste. Anne and County Of Parkland
40.	Rivière Qui Barre Slough — M.D. of Sturgeon
41.	Villeneuve Gravel Pits — M.D. of Sturgeon
42.	Gladu Lake and Gladu Lake Upland — M.D. of Sturgeon and County of Parkland

43. Big Lake — M.D. of Sturgeon, City of St. Albert, City of Edmonton and County of Parkland
44. Muir Lake — County of Parkland
45. Glory Hills — County of Parkland
46. Hubbles Lake — County of Parkland
47. Wagner Natural Area (Wagner Bog) — County of Parkland
48. Devon Sand Dunes — County of Parkland
49. University of Alberta Devonian Botanic Gardens — County of Parkland
50. Clifford E. Lee Nature Sanctuary — County of Parkland
51. Capital City Recreation Park — Edmonton
52. Connors Hill Ski Hill — Edmonton
53. Snow Valley Ski Hill — Edmonton
54. Chickakoo Lake Recreation Area - County of Parkland
55. Telford Lake - City of Leduc and County of Leduc
56. Labyrinth Lake - County of Leduc and County of Wetaskiwin
57. Cawes Lake - County of Leduc and City of Edmonton

The North Saskatchewan River Valley
The Sturgeon River Valley
The Redwater River Valley
Rivière Qui Barre River
The Willow Creek/Weed Creek Drainage System
Conjuring Creek
Blackmud/Whitemud Creek Drainage System
Clearwater Creek
Irvine Creek
Mill Creek
Oldman Creek
Pointe-Aux-Pins Creek
Ross Creek
Astotin Creek

1. WIZARD LAKE - Background Information

(area: CLI Classes 3, 4, and 5 Recreation Capability)

(a) Physical and Biophysical Features

- long, narrow, medium-sized lake (surface area approx. 770 acres)
- occupies an old pre-glacial drainage channel with steep valley walls (>250 ft. in places)
- deep in-shore water
- much of the shoreland is still wooded

(b) CLI Capability Rating

(i)	Recreation:	Class 3 for family boating, swimming, beach activities and family/recreation lodging
		Class 4 for family boating, family/recreation lodging and viewing of wetland or upland wildlife
		Class 5 (west-end) for interesting landform features and viewing of wetland or upland wildlife
(ii)	Waterfowl:	Class 5
		Class 3 (west end)
(iii)	Ungulates:	Class 1 (south shore)
		Class 2 (remaining shoreland)

(c) Existing Recreation Development

- cottage development; boat launching facilities; Golden Jubilee (County) Park: day use, camping and boat launch facilities

(d) Special Features or Considerations

- fishing
- best recreation lake in the south-west part of the Edmonton Region
- only lake with capability for boating in this part of the Region
- steep slopes could be susceptible to erosion

(e) Significance

- regional, possibly provincial, because of the Class 3 beaches

(f) Suggested Use(s)

- Intensive recreation, perhaps including motor boats, in Class 3 and Class 4 recreation areas
- Extensive recreation in Class 5 areas

1. WIZARD LAKE - Recreation Potential

(a) **Recreation Use(s)**
-Intensive recreation, including motorboat use, near Class 3 and Class 4 recreation areas.
-Extensive recreation near Class 5 (west end) recreation area.

(b) **Reasons**

Intensive recreation, including motorboat use:

- surface area 770 acres, CLI Recreation Capability Map indicates "Shoreland with deeper inshore water suitable for swimming or boat mooring or launching", and Classes 3, 4, and 5 recreation capability for "popular forms of family boating" in the eastern two-thirds of the lake.
- east end of lake is Class 5 for waterfowl.
- boating facilities already available.

Extensive recreation:

- west end of lake Class 3 for waterfowl and Class 5 for more dispersed forms of recreation activity.

(c) **Potential**

- the major recreation lake (including boating) in the south portion of the Region.
- boat launch and other facilities already available (e.g. Golden Jubilee Municipal Park).

(d) **Problems**

- could be overused by motorboats as it is a popular, but long and narrow lake ("Lake residents tired of boat traffic" - ***Leduc Booster***, Aug 20, 1989).
- a valuable fishing lake and swimming lake - there could be conflicts with motorboats.
- under two municipal jurisdictions: the County of Leduc and the County of Wetaskiwin.
- the south shore has Class 1 ungulate capability.
- steep shoreland slopes could be susceptible to erosion.

(e) **Management Considerations**

- a ***Wizard Lake Management Plan*** (1979) has already been prepared; a review has been requested.
- designate Wizard Lake as a Conservation/Recreation Area in the Regional Plan.
- prepare a management strategy for controlling motorboating and fishing.

2. PAT O'BRIEN PARK (DEVON) - Background Information

(a) Physical and Biophysical Features

- within the North Saskatchewan River Valley (valley slopes and terrace)
- terrace (golf course) 25 ft.± above the river
- valley walls 150 ft.± & very steep
- much of the existing vegetation preserved where possible

(b) CLI Capability Rating

(i) Recreation: Class 4 for organized camping, canoeing, angling

(ii) Waterfowl: Class 6

(iii) Ungulates: Class 3W

(c) Existing Recreation Development

- downhill & ski jumping facilities; hiking & cross-country ski trails; golf course; camping & day use facilities; playground

(d) Special Features or Considerations

- urban park
- downhill & ski jump facilities
- Birkenbinder cross-country ski race

(e) Significance

- regional, possibly provincial, because of the downhill & ski jumping facilities, golf course & well-known cross-country ski trails

(f) Suggested Use(s)

- specialized outdoor recreation area (urban park, golf course, downhill skiing facility)

2. PAT O'BRIEN PARK (DEVON) - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area for intensive recreation.

(b) **Reasons**

- fully developed urban park with downhill and ski jump facilities, golf course, campground and RV park, picnic area, playground, cross-country and hiking trails, canoe launch area.

(c) **Potential**

- The Devon Recreation Plan proposes continued development of recreation opportunities along Devon's stretch of the North Saskatchewan River Valley.

(d) **Problems**

- some parts of Devon's stretch of the River Valley are considered hazard lands due to the steepness of the slopes and their susceptibility to erosion.

(e) **Management Considerations**

- leaving the "Hazard Lands" as "wilderness", constructing trails so that the steepness of the slope is taken into account, or rerouting trails to follow the open space areas along the top of the bank.
- would be included in a Regional Plan Conservation/Recreation Area designation for this section of the North Saskatchewan River Valley.

3. RABBIT HILL - Background Information

(a) **Physical and Biophysical Features**
- within the North Saskatchewan River Valley (slopes and terrace)
- valley slopes 175 ft.± & very steep

(b) **CLI Capability Rating**

(i)	Recreation:	Class 4 for downhill skiing; opportunities for hiking, nature study or aesthetic appreciation; and vegetation with recreational value
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	Class 3W

(c) **Existing Recreation Development**
- downhill ski facilities

(d) **Special Features or Considerations**
- one of only two areas in the Region which have a "combination of slopes, snow conditions & climate providing downhill skiing opportunities" (CLI Recreation Capability Map)

(e) **Significance**
- regional, because of the downhill ski facilities

(f) **Suggested Use(s)**
- specialized outdoor recreation area (downhill skiing facility)

3. RABBIT HILL - Recreation Potential

(a) Recreation Use(s)

- Specialized Outdoor Recreation Area for intensive recreation (downhill skiing).

(b) Reasons

- downhill ski facility.
- one of the few sites in the Edmonton Region suitable for downhill skiing, having CLI Class 4 recreation capability with a "combination of slopes, snow conditions and climate providing downhill skiing opportunities".
- close to large urban centres.

(c) Potential

- greater promotion.
- would be included in a Regional Plan Conservation/Recreation Area designation for this section of the North Saskatchewan River Valley.

4. GWYNNE CHANNEL - Background Information

(area: the valley bed and slopes)

(a) Physical and Biophysical Features

- glacial meltwater channel with flat floor & steep valley sides, approx. 125-150 ft. deep and 1/2 mile wide
- contains several chain lakes with fluctuating water levels
- valley sides generally wooded
- north of Saunders Lake, the valley becomes broader & shallower

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Coal Lake) for family boating, angling & interesting landform features Class 5 (remainder of channel) for viewing wetland or upland wildlife & interesting landform features
(ii)	Waterfowl:	Class 1
(iii)	Ungulates:	mainly Class 1 Small areas of Class 5

(c) Existing Recreation Development: Waskahegan Trail

- north part of Coal Lake (campground, boat launch facilities - Coal Lake Day Use Area and Boat Launch)

(d) Special Features or Considerations

- outstanding landform feature with educational/interpretive value
- Class 1 capability for both waterfowl & ungulates
- drainage control (dams & ditches)
- steep valley walls susceptible to erosion

(e) Significance

- regional, because of the existing regional trail, the educational/interpretive opportunities and the high capability for waterfowl & ungulates

(f) Suggested Use(s)

- Extensive recreation with limited development (because of steep valley slopes & high waterfowl & ungulate capability)

4. GWYNNE CHANNEL - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation with limited development and an emphasis on educational/interpretive activities.

(b) Reasons

- interesting glacial geomorphic feature (glacial meltwater channel with flat floor and steep valley sides).
- high (Class 1) waterfowl and ungulate capability.
- steep slopes could be susceptible to erosion.
- valley sides generally wooded.
- contains several chain lakes.

(c) Potential

- improvements in the existing Waskahegan Trail, which follows the channel to its outlet (Blackmud Creek).
- outstanding landform feature with educational/interpretive value.
- good precedent for obtaining permission to cross private land (Waskahegan Trail).
- some Crown land.
- Coal Lake has the capability, and is used, for boating.

(d) Problems

- potential erosion problems.
- mostly private land.
- popular snowmobile route between Edmonton and Wetaskiwin.
  (This could interfere with ungulates, although this is not identified as winter range).

(e) Management Considerations

- designation in the Regional Plan as a Nature Conservation Area.
- assess the impact of snowmobile use on the ungulate population; if the effects are negligible, it may be preferable to designate the Channel as a Conservation/Recreation Area in the Regional Plan and use this linear feature as a hiking route in summer/snowmobile route in winter.
- Energy and Natural Resources has purchased 57.40 acres in S.E. 18-48-23-4 (north of Coal Lake) as an ARDA purchase for watershed conservation. In addition, Protective Notations have been placed, by Forestry, Lands and Wildlife, on 57.40 acres in S.E. 18, 73.20 acres in N.E. 18, 156 acres in S.E. 19, 18 acres in S.W. 7 and 23.20 acres in N.W. 7-48-23-4 because of a Dept. of Environment lake stabilization structure/project in Coal Lake (Coal Lake Reservoir) and the lake to the North. Protective Notations have also been placed on 44.20 acres in N.E. 18-48-23-4 because of the fragile slope hazard and on 102.10 acres in S.E. 19-48-23-4 because of the general topographic constraints posed by the rolling topography.
- the Waskahegan Trail Association has a Licence of Occupation in E 18 and S.E. 19-48-23-4 (along the east shore of the unnamed lake).
- Ducks Unlimited Canada has a Licence of Occupation on 63.01 acres (the bed and shore) of the unnamed lake in S.E. 19-48-23-4.

5. BIG HAY LAKE - Background Information

(area: CLI Class 1S Waterfowl Capability)

(a) Physical and Biophysical Features

- large, shallow lake in a large depression surrounded by marshes & small intermittent lakes
- relatively flat, cleared area within the hummocky dead-ice moraine

(b) CLI Capability Rating

(i) Recreation: Class 4 for viewing wetland & upland wildlife

(ii) Waterfowl: Class 1S

(iii) Ungulates: predominantly Class 5
some Class 2

(c) Existing Recreation Development: none

(d) Special Features or Considerations

- one of only three Class 1S waterfowl lakes in the Region
- in the centre of a Class 1 waterfowl area
- excellent opportunity for wildlife viewing
- a Ducks Unlimited Wetlands for Tomorrow Project
- high environmental sensitivity

(e) Significance

- provincial because of its Class 1S waterfowl capability (one of the few such areas in the Province)

(f) Suggested Use(s)

- Conservation (designation as a Provincial Conservation Area or Provincial Environmentally Significant Area if the appropriate legislation were adopted).

5. BIG HAY LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Conservation.

(b) **Reasons**
- one of only three Class 1S waterfowl lakes in the Region (one of only 20 in the Province).

(c) **Potential**
- much of the shoreland is Crown land.
- a Ducks Unlimited "Wetlands for Tomorrow" Project.
- relatively isolated with perhaps less pressure for recreation "development".
- potential for linkage, via Clearwater Creek, with the Gwynne Channel to the west, the historic Hay Lakes Trail to the northeast and with the excellent waterfowl areas of Bittern Lake and its surroundings to the southeast.

(d) **Problems**
- one of the few Class 4 recreation lakes in the County of Leduc (although for viewing wetland and upland wildlife, not for more intensive forms of recreation).
- focus of the Big Hay Lake Drainage District and ditch network (potential for negative impacts).
- very sensitive marshy shoreland
- under two jurisdictions: County of Leduc and County of Camrose.

(e) **Management Considerations**
- designation as a Provincial Environmentally Significant Area (if such legislation were adopted).
- designation in the Regional Plan as a Nature Conservation Area.
- compensation or other trade-offs to private landowners to preserve the shorelands and surrounding marshes.
- Alberta Forestry, Lands and Wildlife has placed a Consultative Notation on the following areas around Big Hay Lake as they are Habitat Management Areas (Big Hay Lake and Bittern Lake Wetlands for Tomorrow Project): - N.E. 17, S.W. 30 and N.W. 30-48-23-4 and N.E. 24, S.E. 25, and S.W. 36-48-23-4. A Protective Notation has also been placed on both N.E. 17-48-22-4 (96 acres) and S.E. 36-48-23-4 (160 acres); no agricultural activities are permitted except grazing and hay. The S.W. 36 has organic, poorly drained soils; any surface dispositions must include a flooding clause.

6. PARC QUATRE SAISONS/FOUR SEASONS PARK (BEAUMONT) - Background Information

(a) Physical and Biophysical Features

- landscaped urban park on rolling terrain
- 52.5 acres
- includes a creek (the existing stormwater drainage channel) & pond

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural and social interest (no longer applicable)
(ii)	Waterfowl:	Class 4
(iii)	Ungulates:	Classes 1 & 3 (no longer applicable)

(c) Existing Recreation Development

- when complete, the park will include a creek, a 5.8 acre pond, baseball diamonds and soccer fields and a campground

(d) Special Features or Considerations

- campground will attract non-local users

(e) Significance

- local, possibly regional, because of its large size and its campground in association with other recreation features

(f) Suggested Use(s)

- Specialized outdoor recreation area (urban park)

6. PARC QUATRE SAISONS/FOUR SEASONS PARK (BEAUMONT) - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area for intensive recreation.

(b) **Reasons**
- urban park under construction

(c) **Potential**
- could be a regional park because of its:
  (a) large area (over 50 acres)
  (b) stocked fishing pond
  (c) overnight camping facility (proposed)
  (d) proximity to large population concentrations

7. LOOKING BACK LAKE & JOSEPH LAKE - Background Information

(area: the lakes' shoreland and the intervening upland)

(a) Physical and Biophysical Features

- low relief area (hummocky dead ice moraine at the edge of the Cooking Lake Moraine), especially in the west half
- medium sized lakes
- Joseph Lake surface area approx. 1700 acres
- Looking Back Lake surface area approx. 380 acres

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (lake shorelands) for family boating & viewing wetland & upland wildlife Class 5 (west of Looking Back Lake) for opportunities for hiking & nature study or aesthetic appreciation; & for viewing wetland & upland wildlife Class 6 (remainder of area between lakes) for viewing wetland & upland wildlife & cultural landscape patterns of agricultural or social interest
(ii)	Waterfowl:	Class 2 (Looking Back Lake) Class 3 (Joseph Lake) Class 5 (area between lakes)
(iii)	Ungulates:	mainly Class 3 some Class 2

(c) Existing Recreation Development:

- Centennial Park (Joseph Lake), County park with campground, hook-ups, day use & picnic area, washrooms, concession, playgrounds, beach, boat launch, opportunities for boating, sailing, fishing & swimming

(d) Special Features or Considerations

- few lakes in the south part of the Region have capability for family boating
- Joseph Lake has a maximum depth of 10 ft. & an average depth of 6 ft. making it suitable for motor boats
- there is little Class 4 recreation land in the south part of the Region
- land area probably has low environmental sensitivity

(e) Significance

- probably local at present - could be regional because of the large area involved, the lakes' Class 4 capability for family boating and the existing recreation facilities

(f) Suggested Use(s)

- Extensive recreation involving motorized vehicles (motor boats on the lakes, snowmobiles, other motorized vehicles), because of the (probably) low environmental sensitivity.

7. LOOKING BACK LAKE AND JOSEPH LAKE - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation for motorized vehicles, including snowmobiles, ATV's, dirt bikes, and motorboats on the lakes.

(b) Reasons

- both lakes are Class 4 for family boating.
- Joseph Lake has a surface area of approx. 1700 acres, a max. depth of 10ft. and an average depth of 6ft.; Looking Back Lake has a surface area of 380 acres.
- there are few lakes in the south part of the Region with capability for family boating.
- existing development: Centennial Park on Joseph Lake has day use, overnight, boating and beach facilities.
- except for the immediate shoreland, the area has low waterfowl capability; therefore, environmental sensitivity is probably low.

(c) Potential

- Centennial Park on Joseph Lake provides a focus for recreation activities and could perhaps be upgraded to a "four seasons" recreation area. The present recreation area is well laid out, treed and grassed.
- it might be possible to develop a trail system for motorized vehicles.
- there is some Crown land.

(d) Problems

- the land is relatively flat, largely cleared and mainly under private ownership.
- the lakes have Class 2 (Looking Back) and Class 3 (Joseph) capability for waterfowl production.
- there are numerous oil wells and oil tanks.

(e) Management Considerations

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- promote Joseph Lake and Looking Back Lake as recreation boating lakes (perhaps to take pressure for motorboating off Hastings Lake, which also has Class 4 recreation capability for family boating use but is more environmentally sensitive).
- restrict motorboats from areas (e.g. marshy areas) which are good waterfowl habitat and nesting sites; encourage canoeing in these areas.
- since these lakes are good waterfowl production lakes, but do not appear to be migration or staging lakes, there may be less conflict if powerboats are restricted during nesting times.
- upgrade access to the lakes.
- obtain easements for a motorized vehicle trail to connect lakes and scattered parcels of Crown land.
- restrict motorized vehicle use in shoreland areas during waterfowl breeding and nesting periods.
- Alberta Forestry, Lands and Wildlife has placed Protective Notations on part of the north shore of Joseph Lake (59 acres in N.E. 7-50-21-4) relating to the recreational potential of Joseph Lake and its value as a waterfowl production area (Goose nesting habitat). No agricultural activities are permitted except grazing and hay; special conditions may apply on grazing dispositions. Protective Notations have also been placed on LS11 and S.E. LS14 of N.W. 12-50-22-4, as Lakeshore Protection areas. The land involved, on the north shore of Joseph Lake, is subject to flooding.

8. MINISTIK LAKE & OLIVER LAKE - Background Information

(area: primarily CLI Class 4 Recreation Capability)

(a) Physical and Biophysical Features

- hummocky dead-ice moraine (part of the Cooking Lake Moraine) (relief 50 ft.±)
- medium sized lakes with very undistinct shorelines
- Ministik Lake surface area approx. 3400 acres
- Oliver Lake surface area approx. 1300 acres

(b) CLI Capability Rating

(i)	Recreation:	Class 4 for viewing wetland & upland wildlife and for hiking & nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 2 (Ministik Lake) Class 3 (Oliver Lake)
(iii)	Ungulates:	Class 2 (east half) Class 3 (west half)

(c) Existing Recreation Development: Waskahegan Trail

(d) Special Features or Considerations

- Ministik Lake has a provincial bird sanctuary, considered regionally very important for waterfowl (ESA Study)
- hunting is sometimes permitted in the preserve
- proposed equestrian trail & possibly a skidoo route ***(Strathcona Outdoor Master Plan)***
- lake shorelines are marshy & indistinct - environmental sensitivity is probably high

(e) Significance

- regional because of its extensive land area, important waterfowl capability & Class 4 recreation capability
- extensive area (the bird sanctuary is 1700 acres)
- large populations of moose, whitetailed deer, free-ranging elk & fur-bearing mammals

(f) Suggested Use(s)

- Extensive recreation, with limited development in the bird sanctuary, & an emphasis on nature study

8. MINISTIK LAKE AND OLIVER LAKE - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation, with limited development in the bird sanctuary and an emphasis on nature viewing/study.

(b) Reasons

- Ministik Lake Migratory Bird Sanctuary - Crown Land.
- Ministik Lake has Class 2 waterfowl capability; Oliver Lake has Class 3 waterfowl capability.
- knob and kettle topography (part of the Cooking Lake Moraine).
- the Waskahegan Trail already runs through the Bird Sanctuary.
- extensive area, with large populations of moose, white-tailed deer, elk and fur-bearing mammals.

(c) Potential

- equestrian trail (separate from the Waskahegan Trail) proposed between Ministik and Wanisan Lakes ***(Strathcona Outdoor Master Plan).***
- upgrade the Waskahegan Trail.
- a nature or "eco-trail" around the lakes. Ministik Lake is recognized as regionally very important for waterfowl.
- much of the land around Ministik Lake and between Oliver and Joseph Lakes is Crown land.

(d) Problems

- hunting and off-road vehicles "allowed" in the Bird Sanctuary.
- lake shorelands have high environmental sensitivity.

(e) Management Considerations

- designate the area as a Nature Conservation Area in the Regional Plan.
- restrict hunting and off-road vehicles (encourage off-road vehicle use in the Joseph/Looking Back Lake area to the west).
- Alberta Forestry, Lands and Wildlife has placed a Protective Notation on approx. 161 acres of the Ministik Lake Migratory Bird Sanctuary (S.E. 12-51-21-4) as a Waterfowl Habitat Protection area; no agriculture is allowed.
- Ducks Unlimited Canada has a Licence of Occupation for much of Ministik Lake Migratory Bird Sanctuary.
- Alberta Forestry, Lands and Wildlife has placed Protective Notations on part of the north shore of Oliver Lake (8.10 acres comprising pt. of LS15 and 16 of N.E. 8-50-21-4) as a Waterfowl Production area (Goose nesting habitat). No agriculture is permitted except grazing; special conditions may apply on grazing dispositions. A Protective Notation has also been placed on Island No. 72 (Pt. LS15) in Oliver Lake as a Waterfowl Production area (Goose nesting site). The area involved is approx 2.50 acres.

9. HASTINGS LAKE (INCLUDING SOUTH HASTINGS UNGULATE AREA, PARKLAND & HASTINGS LAKE NATURAL AREAS & SISIB LAKE) - Background Information

(area: ESA and Natural Area boundaries, excluding some areas of CR development)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine - 'knob & kettle' moraine (relief 100 - 150 ft.±)
- medium-sized lake (surface area >2249 acres)
- extensive area (could be >12,000 acres)
- large tracts of undisturbed woodland

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Hastings Lake) for angling, family boating, family/recreation lodging & viewing of wetland or upland wildlife Class 5 (remaining area) for hiking & nature study or aesthetic appreciation, viewing wetland +/or upland wildlife
(ii)	Waterfowl:	Class 1 (Sisib Lake & east & west parts of Hastings Lake & shoreland) Class 5 (middle portion of Hastings Lake) Class 3 (remainder of area)
(iii)	Ungulates:	primarily Class 2 Class 3 along the north shore of Hastings Lake

(c) Existing Recreation Development

- campground, cottage development, community hall, water access (on Hastings Lake); sportsfield, equestrian facilities, community hall, picnic grounds & Ministik Hills Field Study Centre (South Hastings Ungulate Area); the Waskahegan Trail; hiking/ski trails (e.g. Parkland Natural Area)

(d) Special Features or Considerations

- Hamlet of Hastings Lake (development in Class 5 waterfowl area)
- except for shorelands, low environmental sensitivity
- includes two Provincial Natural Areas
- artificial islands for Canada Geese in Sisib Lake
- some CR & small holdings subdivision in South Hastings Ungulate Area
- Hastings Lake shoreland one of few Class 4 recreation areas in the Region

(e) Significance

- regional because of area involved, high waterfowl & ungulate capability, amount of undisturbed forest and Provincial Natural Areas

(f) Suggested Use(s)

- Extensive recreation (with higher development in the vicinity of the Hamlet of Hastings Lake) for hiking, snowshoeing, cross-country skiing - Nature trails

9. HASTINGS LAKE (INCLUDING SOUTH HASTINGS UNGULATE AREA, PARKLAND AND HASTINGS NATURAL AREAS AND SISIB LAKE) - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation.

(b) **Reasons**

- large area of interesting and varied topography (Cooking Lake Moraine).
- large tract of undisturbed woodland.
- some areas of Class 1 waterfowl capability.
- Class 4 and 5 recreation capability.

(c) **Potential**

- the area was studied intensively in the ***Cooking Lake Area Study***.
- away from the shoreland, relatively low environmental sensitivity - could probably handle a fair number of users.
- seven quarter sections are Crown land, including two Provincial Natural Areas (Parkland and Hastings Lake).
- the Waskahegan Trail passes through this area.
- there is an existing educational field study centre (Ministik Hills).
- there are several "historic" sites in or near the area and potential for trail links (e.g. the proposed Strathcona Heritage Bike Pathway, the historic Cooking Lake Trail, a proposed equestrian trail - ***Strathcona Outdoor Master Plan***).
- large parts of the area are still unimpacted by agriculture and CR development.

(d) **Problems**

- CR development and small holdings are fragmenting the area.
- much of the land is private.
- zoned for CR development in the County of Strathcona's Land Use Bylaw.
- the Hamlet of Hastings Lake on the south shore of the lake could act as a focus for more intensive recreation development (although, at present, there is only residential development).
- although Hastings Lake has Class 4 recreation capability for family boating, boating poses a threat to sensitive bird species (e.g pelicans, grebes and cormorants).

(e) **Management Considerations**

- designation in the Regional Plan as a Conservation/Recreation Area.
- restrictions on hamlet expansion and CR development, around Hastings Lake in particular.
- restrictions on motorized vehicles.
- an ASP for the area, with a comprehensive outline of MR and ER areas preferred (when subdivision occurs) to allow development of a continuous trail system.
- easements across private land, or an agreement with landowners (as was done with the Waskahegan Trail).
- Parkland Natural Area No. 1 (11-51-20-4) is an Educational Natural Area established by Order-in-Council. Approximately 320 (W11) of the 640 acres are within the Co. of Strathcona. Hastings Lake Natural Area No. 472 (also known as Deville Natural Area) is a candidate Recreation Natural Area consisting of 153 acres in S.E. 29-51-20-4. A Grazing Permit has been granted for almost 158 acres in the quarter section.
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has the lead role, with close liaison with the local planning agencies, in site management of the Provincial Natural Areas.

10. COOKING LAKE & MCFADDEN LAKE - Background Information

(area: CLI Class 1 Waterfowl Capability)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine - 'knob & kettle' moraine
- largest lake in the Region (surface area approx. 9280 acres)
- 70 percent of the shoreline still forested (ESA Study)

(b) CLI Capability Rating

(i)	Recreation:	Class 3 (North Cooking Lake, South Cooking Lake, Lakeview & pt. S.E. shore) for family/recreation lodging, family boating & beach activities including swimming Class 4 for family/recreation lodging, family boating, vegetation with recreational value, organized camping & viewing wetland wildlife Class 5 (most of shoreland & McFadden Lake) for viewing wetland & upland wildlife, family boating & angling
(ii)	Waterfowl:	Class 1 (shoreland & McFadden Lake) Class 5 (most of Cooking Lake surface area)
(iii)	Ungulates:	predominantly Class 3 Class 1 between Half Moon Lake & Cooking Lake some small areas of Class 2

(c) Existing Recreation Development

- Hamlets of North & South Cooking Lake
- Lakeview cottage development
- airfield/seaplane base
- campgrounds & group campsites, boat launch facilities, water access for swimming & boating
- sports fields & skating rink (St. Luke's School)
- equestrian facilities

(d) Special Features or Considerations

- largest recreation lake in the Region (sufficient depth)
- in the centre of a significant recreational & historic area
- Collingwood Cove, on the north shore, is considered by Strathcona Co. to be a provincially significant environmentally interesting site
- fishing

(e) Significance

- regional, possibly provincial, because of the combination of Class 3 & 4 recreation (beaches), high waterfowl & ungulate capability, large size & depth of lake suitable for recreational purposes and combination of geological, historical, archaeological and wildlife features

(f) Suggested Use(s)

- Intensive recreation in Class 3 and some Class 4 areas; motor boat use (with some restrictions, e.g. north end of Collingwood Cove & during migration period of mid-Sept. to mid-October) & extensive recreation around the remainder of the shoreland & McFadden Lake (with minimum development around McFadden Lake)

10. COOKING LAKE AND McFADDEN LAKE - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation, with motorboat use allowed in the east and west portions of Cooking Lake.
- Intensive recreation in the immediate vicinity of existing hamlets.

(b) Reasons

- a large lake (Cooking Lake) with Class 3 beaches and Class 4 and 5 recreation capability for family boating (much of the lake is Class 5 for waterfowl).
- the shoreland and McFadden Lake have Class 1 waterfowl capability.
- varied and interesting topography (Cooking Lake Moraine).
- much of the shoreland is still forested.
- boat launch facilities already available.
- the lake's surface area is over 9000 acres, its max. depth 15 ft. and average depth 5 ft.

(c) Potential

- the area was studied intensively in the ***Cooking Lake Area Study***.
- the largest lake in the Region with Class 3 recreation capability.
- Cooking Lake is at the heart of one of the Region's most interesting areas in terms of topography, waterfowl, history and archaeology.
- the lake is large enough to accommodate many types of recreation use - there are a number of existing and potential outdoor recreation sites.
- fishing is possible.
- there is a Provincial campground on the south shore of Cooking Lake.
- Collingwood Cove, on the north end of Cooking Lake, is recognized by the County of Strathcona as an "environmentally interesting site".
- the proposed Strathcona Heritage Bike Pathway will run along the south shore ***(Strathcona Outdoor Master Plan)*** and the Waskahegan Trail runs between Cooking Lake and Hastings Lake.

(d) Problems

- except for some scattered MR parcels and some non-recreation Crown land around Birch Bay, the land is private.
- conflicting land uses e.g. resort development in Collingwood Cove, Cooking Lake airport and floatplane base in a lake which is considered a "...key component of the very important production, moulting, staging and migration complex for waterfowl in the Cooking Lake Moraine" (ESA Study), with high environmental sensitivity.
- potential for conflict between motorboats, swimming and fishing.

(e) Management Considerations

- designate the area, except McFadden Lake, as a Conservation/Recreation Area and McFadden Lake as a Conservation Area in the Regional Plan.
- McFadden Lake, which is a Class 1 waterfowl lake, but separated from Cooking Lake by Highway 14, should be kept as a separate nature study/short-hike/self-guiding trail area ("eco-trail")
- motorboats, float planes and other mechanized vehicles should be prohibited from key waterfowl areas such as Collingwood Cove and Birch Bay.
- continued public education.
- the ***County of Strathcona Outdoor Master Plan*** proposes an interpretive park on County land at the north end of Collingwood Cove; the park would include hiking trails and a waterfowl blind.
- easements could be arranged or permission for trail construction across private land.

11. NORTH COOKING LAKE MEGABLOCK AND NORTH COOKING LAKE NATURAL AREA

- Background Information

(area: ESA and Natural Area boundaries)

(a) **Physical and Biophysical Features**

- part of the Cooking Lake Moraine
- the North Cooking Lake Megablock is a bedrock block transported by glacial action
- several lakes and sloughs
- local relief 75 ft.+

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	mainly Class 3 some Class 5 (south and west)
(iii)	Ungulates:	mainly Class 3 some Class 2

(c) **Existing Recreation Development:** none at present

(d) **Special Features or Considerations**

- megablock area has low environmental sensitivity (ESA Study)
- ***Strathcona Outdoor Master Plan*** proposes informal use for the North Cooking Lake Natural Area, a Provincial Natural Area
- good educational/interpretive value
- low environmental sensitivity (megablock area) because of impact of agriculture & CR development

(e) **Significance**

- regional - a "regionally interesting geological feature" (megablock) having educational and interpretive value (ESA Study)

(f) **Suggested Use(s)**

- Extensive recreation, with motorized vehicles (snowmobiles, ATVs) permitted in the Megablock area, because of its low environmental sensitivity, large area and interesting terrain

11. NORTH COOKING LAKE MEGABLOCK AND NORTH COOKING LAKE NATURAL AREA - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation, with motorized vehicles (snowmobiles, ATVs) permitted in the megablock area.

(b) **Reasons**

- the Megablock Area is a large area with interesting topography and low environmental sensitivity.
- the Cooking Lake Megablock is a relatively rare geological feature.
- the area has Class 5 recreation capability for hiking, nature study and viewing wetland and upland wildlife.
- there are some undisturbed forested areas.

(c) **Potential**

- the area was intensively studied in the ***Cooking Lake Area Study***.
- the megablock has educational/interpretive value (ESA Study).
- the Natural Area has good "nature study" potential (Class 3 waterfowl and ungulate capability).
- the North Cooking Lake Natural Area is Crown land.
- the proposed Strathcona Heritage Bike Pathway will eventually run through the Megablock/Natural Area (***Strathcona Outdoor Master Plan***).
- there are several potential historic sites in and near the area.

(d) **Problems**

- the megablock area is already heavily impacted by agriculture, CR development and transportation; much of the megablock area has been fragmented by multiple-parcel CR and small holdings subdivision.
- zoned for CR development in the County of Strathcona's Land Use Bylaw.
- Plans for upgrading Wye Road could have a serious negative impact on North Cooking Lake Natural Area.

(e) **Management Considerations**

- designation in the Regional Plan as a Conservation/Recreation Area.
- a comprehensive plan (Outline Plan, ASP) for acquiring MR during subdivision to develop a comprehensive trail system.
- development of an interpretive centre.
- North Cooking Lake Natural Area No. 62 is a Recreation Natural Area established by Order-in-Council and encompassing approx. 405 acres of N. 11, S.E. 11, and S.W. 11-52-21-4.
- Site management of the Provincial Natural Area is under the Public Lands Division of Alberta Forestry, Lands and Wildlife; however, input from local planning agencies is encouraged.
- prepare an environmental impact assessment (EIA) with respect to the upgrading of Wye Road to minimize any negative impact on the Natural Area.

12. WANISAN LAKE - Background Information
(area: CLI Class 4 Recreation Capability)

(a) Physical and Biophysical Features
- part of the Cooking Lake Moraine
- 70 percent of shoreline in natural condition
- relatively secluded lake in a relatively natural area
- south shoreland flat
- north shoreland knob & kettle terrain

(b) CLI Capability Rating

(i)	Recreation:	Class 4 for family boating and for viewing wetland and upland wildlife
(ii)	Waterfowl:	Class 4
(iii)	Ungulates:	primarily Class 2 Class 3 on the south shore

(c) Existing Recreation Development
- hiking/skiing trails in the Cooking Lake - Blackfoot Grazing, Wildlife and Provincial Area; Waskahegan Trail

(d) Special Features or Considerations
- associated with the Cooking Lake - Blackfoot Grazing, Wildlife and Provincial Area which borders the lake on the north and west
- regionally important waterfowl lake with islands providing secure nesting sites (ESA Study)
- lakeshore considered highly sensitive to disturbance (ESA Study)
- the ***Strathcona Outdoor Master Plan*** proposes interpretive hiking around the lake and no boats allowed on the lake

(e) Significance
- regional, because of the existing development on the Blackfoot Grazing Reserve, because it is still a largely natural lake and because the Waskahegan Trail runs along the east shore

(f) Suggested Use(s)
- Extensive recreation with limited development

12. WANISAN LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation with limited development

(b) **Reasons**

- large area of varied and interesting topography (Cooking Lake Moraine).
- much of the shoreline is still in a natural condition.
- primarily Class 2 ungulate capability.
- Class 4 recreation capability for family boating and viewing upland and wetland wildlife.

(c) **Potential**

- proposed equestrian trail link with Ministik Lake ***(Strathcona Outdoor Master Plan)***.
- little subdivision around the lake as yet.
- north end of lake is included in the Cooking Lake - Blackfoot Grazing, Wildlife and Provincial Recreation Area (existing extensive recreation area).
- the Waskahegan Trail runs near the northeast shore and provides a direct link with Hastings Lake to the south and Trapper's Lake/Ross Creek/Fort Saskatchewan to the north.
- the ***Strathcona Outdoor Master Plan*** recommends interpretive hiking on the shoreland and no boats on the lake.
- good wildlife viewing potential - considered an important production, staging and migration lake for waterfowl (ESA Study).
- relatively isolated, yet close to areas of topographic, historical and wildlife interest.

(d) **Problems**

- could eventually be pressure to allow boating (Class 4 recreation capability for family boating).
- lakeshore is highly sensitive to disturbance because of waterfowl habitat.
- hunting and trapping occur in the area.
- land outside the Cooking Lake - Blackfoot Grazing, Wildlife and Provincial Area is mostly private.

(e) **Management Considerations**

- designation in the Regional Plan as a Nature Conservation Area.
- motorized vehicles should continue to be prohibited on or near the lake.
- monitor hunting and trapping activities in the vicinity - restrict such activities in the immediate vicinity of Wanisan Lake.
- perhaps allow some canoeing on the lake.
- Wanisan Lake Natural Area No. 194 on the east side of Wanisan Lake (LS1 and 8 of 8-52-20-4) is a candidate Recreation Natural Area of approx. 198 acres.
- The Public Lands Division of Alberta Forestry, Lands and Wildlife has responsibility for site management of Provincial Natural Areas, with input from the local planning agencies.

13. ANTLER LAKE - Background Information
(area: CLI Class 5 w/o Recreation Capability)

(a) **Physical and Biophysical Features**
- part of the Cooking Lake Moraine
- small lake with a surface area of 630 acres
- east and south shore heavily impacted by CR and resort development
- much of the south and east shore still wooded

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	Class 3

(c) **Existing Recreation Development**
- cottage development on east & south shores; Antler Lake Grounds - recreation complex, sports fields, skating rink

(d) **Special Features or Considerations**
- Antler Lake Islands Natural Area (islands) provide secure nesting sites, used by waterfowl for production, moulting, staging & migration (ESA Study)
- Strathcona Outdoor Master Plan proposes informal use of the Natural Area

(e) **Significance**
- local at present, because of existing development and moderate waterfowl and ungulate capability

(f) **Suggested Use(s)**
- intensive recreation along east and south shores
- extensive recreation along west and north shores, and no development on the islands

13. ANTLER LAKE - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation (west shore).
- Intensive recreation (east shore).
- Specialized Outdoor Recreation Area (Islands) as an educational/interpretive site for nature study.

(b) Reasons

- the Antler Lake islands offer secure nesting sites and are used by waterfowl for production, moulting, staging and migration (ESA Study).
- interesting and varied topography (Cooking Lake Moraine).
- Class 5 recreation capability for viewing upland and wetland wildlife.
- Class 3 waterfowl and ungulate capability.
- the east shore is already subdivided for multiple-parcel CR development.

(c) Potential

- the islands have educational/interpretive value - the ***Strathcona Outdoor Master Plan*** classifies the islands as a conservation area for informal use.
- proposed Strathcona Heritage Bike Pathway will link Antler Lake with Cooking Lake and Bennett Lake.
- in an area of high topographic, historical and wildlife interest.

(d) Problems

- the east shore is already heavily impacted by CR development.
- predominately private land.

(e) Management Considerations

- designate the Antler Lake islands as a Conservation Area and the reminder of the lake shoreland as a Conservation/Recreation Area in the Regional Plan.
- "develop" the remaining (west shore mainly) lakeshore for hiking/walking/cross-county skiing, canoe and non-motorized boat use, picnic grounds and nature study.
- Antler Lake Island Natural Area No. 498 is a Conservation Natural Area established by Order-in-Council. The 2.5 acre island is located in W.LS5 and LS12 of 13 and E.LS8 and LS9 of 14-52-21-4.
- site management of the Provincial Natural Area is the responsibility of the Public Lands Division of Alberta Forestry, Lands and Wildlife, with input from local planning agencies.

14. BENNETT LAKE AND ENVIRONS - Background Information

(area: Bennett Lake Shoreland and Strathcona Wilderness Centre)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine - low relief (50 ft.+)
- relatively undisturbed forest, including spruce bogs, and shoreline
- Bennett Lake surface area (est.) 275 acres

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	mainly Class 3 some Class 4 on the north-east shore
(iii)	Ungulates:	Class 5 (Bennett Lake shoreland) Class 2 (remainder of area)

(c) Existing Recreation Development

- Strathcona Wilderness Centre with hiking trails, interpretive site, lodging, water access (canoeing), cross-country ski trails and picnic area

(d) Special Features or Considerations

- East Strathcona Natural Area (conservation area)
- low environmental sensitivity except for the shoreline and spruce bogs (ESA Study)
- School Board may be involved in educational nature study programs ***(Strathcona Outdoor Master Plan)***

(e) Significance

- regional because of the diverse habitat, existing interpretive sites and trails, existing outdoor programs and proximity to Cooking Lake and Elk Island National Park

(f) Suggested Use(s)

- Extensive recreation with emphasis on educational/interpretive activities

14. BENNETT LAKE AND ENVIRONS - Recreation Potential

(a) **Recreations Use(s)**

- Extensive recreation with emphasis on educational/interpretive activities.

(b) **Reasons**

- existing Strathcona Wilderness Centre.
- large area of varied and interesting topography (Cooking Lake Moraine).
- relatively undisturbed shoreline and forest, including spruce bogs.
- Class 5 recreation capability for hiking, nature study and viewing wetland and upland wildlife.
- mainly Class 2 ungulate capability.

(c) **Potential**

- well established outdoor centre with hiking/cross-country ski trails, picnic area, ski rentals, lodge, canoe rentals, interpretive centre.
- mainly County land.
- proposed Strathcona Heritage Bike Pathway will run along the north boundary.
- potential for linkage with the Waskahegan Trail approx. one mile to the east in Elk Island National Park (walk/cross-country ski route proposed in the ***Strathcona Outdoor Master Plan***.
- except for the shoreline and bogs, relatively low environmental sensitivity.

(d) **Problems**

- south shore of lake private land.
- sensitive shoreline and spruce bogs.
- BMX competition site immediately to the north could be a noisy factor.

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- restrict development and clearing around the lake.
- the ***Strathcona Outdoor Master Plan*** encourages the involvement of the School Board in educational nature study programs.

15. TRAPPER'S LAKE AND TRAPPER'S LAKE FOREST - Background Information

(area: ESA boundaries plus some additional land)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine - hummocky dead-ice moraine
- extensive area (Forest approx. 3600 acres) - generally low relief
- largely undisturbed forest
- the surface area of Trapper's Lake is 340 acres

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for family boating (Trapper's Lake), for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	mainly Class 2 some Class 3

(c) Existing Recreation Development

- Waskahegan Trail runs though Trapper's Lake Forest

(d) Special Features or Considerations

- only lake in north part of Strathcona County with opportunity for family boating
- shoreline has high environmental sensitivity (ESA Study)
- forest has low environmental sensitivity (ESA Study)
- need for fencing to reduce impact of livestock on lake
- some CR development in forest area

(e) Significance

- regional - because of the Waskahegan Trail, though Trapper's Lake, with Class 5 recreation capability, may be only locally significant

(f) Suggested Use(s)

- Extensive recreation because of its topography and largely undisturbed forest, its moderate waterfowl and good ungulate capability. Canoes and non-motorized boats could be permitted since the lake has capability for family boating.

15. TRAPPER'S LAKE AND TRAPPER'S LAKE FOREST - Recreation Potential

(a) Recreation Use(s)

- Extensive recreation

(b) Reasons

- a large area of varied and interesting terrain (Cooking Lake Moraine).
- relatively undisturbed forest.
- some areas of Class 1 ungulate capability.
- Class 2 ungulate and Class 3 waterfowl capability.
- Class 5 recreation capability for hiking, nature study and viewing upland and wetland wildlife.

(c) Potential

- the Waskahegan Trail passes through the Forest from Elk Island National Park to Fort Saskatchewan.
- the Forest has relatively low environmental sensitivity (ESA Study).
- the proposed Strathcona Heritage Bike Pathway will follow the west shore of Trapper's Lake and pass through the Forest ***(Strathcona Outdoor Master Plan)***.
- only lake with recreation capability (Class 5) for family boating in the north part of the County.
- permission has been obtained from private landowners for the public to use the Waskahegan Trail where it is located on private land.

(d) Problems

- the lake shoreline has high environmental sensitivity.
- much of the Forest area has been fragmented by CR subdivision and small holdings.
- the existing MR lots appear to be scattered parcels.
- there is a need for fencing to restrict livestock access to the lake.
- almost all the land is in private ownership.
- further clearing of the forest could decrease its wildlife habitat value (ESA Study).

(e) Management Considerations

- designation in the Regional Plan as a Conservation/Recreation Area.
- fencing to restrict cattle access to the lake.
- restrict boating to canoes and non-motorized boats.
- restrict further CR development.
- a good precedent has been set by the Waskahegan Trail Association in obtaining permission to cross private land.

16. HALF MOON LAKE - Background Information

(area: CLI Classes 3 and 4 Recreation Capability)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine
- within a prominent glacial meltwater channel with gradual slopes less than 50 ft. high
- small lake with a surface area of approx. 90 acres
- vegetation partly cleared for agriculture

(b) CLI Capability Rating

(i)	Recreation:	Class 3 (eastern 2/3rd's) for beach activities, swimming, family boating, family/recreation lodging and viewing wetland wildlife Class 4 (west 1/3rd) for family boating, family/recreation lodging and viewing wetland wildlife
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	Class 1

(c) Existing Recreation Development

- cottage development and Half Moon Lake Resort (campground, picnic ground, fishing, equestrian facilities, water access, sports field and concession)

(d) Special Features or Considerations

- north and south shores already intensively developed for recreation purposes
- stream course between Half Moon Lake and Cooking Lake may still be a Class 1 ungulate corridor
- one of the few Class 3 beach areas in the Region
- probably low environmental sensitivity because of existing development

(e) Significance

- probably regional, because of Class 3 beaches but overuse and continued private cottage development could reduce its attractiveness

(f) Suggested Use(s)

- Intensive recreation because of its Class 3 recreation rating and existing development. This is a good lake for motor boating (if not overused) because of its Class 3 and 4 capability for family boating, existing facilities and low environmental sensitivity.

16. HALF MOON LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Intensive recreation, with motor boat use.

(b) **Reasons**
- Class 3 (eastern two-thirds) recreation capability for beach activities including swimming, family boating, family recreation lodging and viewing wetland wildlife.
- Class 4 (western third) for family boating, family recreation lodging and viewing wetland wildlife.
- existing development.
- low environmental sensitivity (ESA Study).

(c) **Potential**
- existing Half Moon Lake Resort, with day use, overnight use, boating, swimming and other facilities.
- existing cottage development.

(d) **Problems**
- small size of lake (90 acres) could result in overcrowding and conflicts with swimming and fishing.
- Class 1 ungulate capability.

(e) **Management Considerations**
- designate the area as Conservation/Recreation in the Regional Plan.
- designated swimming areas.
- restrict development in Class 1 ungulate area (stream channel) between Cooking Lake and Half Moon Lake (may still be a wildlife corridor).

17. HALF MOON LAKE MELTWATER CHANNEL - Background Information
(area: ESA boundary)

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine
- a prominent landform feature - a glacial meltwater channel - with gradual slopes rising less than 50 ft.
- partly cleared for agriculture

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (lake west of Half Moon Lake) for family boating, family/recreation lodging and viewing wetland wildlife Class 5 (remainder of channel) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	mainly Class 3, some Class 2

(c) Existing Recreation Development

- Fultonvale/Strathcona Olympiette (school, sports fields, community hall or recreation complex, skating rink and equestrian facilities)

(d) Special Features or Considerations

- low environmental sensitivity (ESA Study)
- one lake has Class 4 capability for family boating and family/recreation lodging
- linear feature - possible location for trail linking Cooking Lake and Sherwood Park Natural Area
- proposed Strathcona Heritage bike pathway and a proposed equestrian trail will cross the Channel at several points ***(Strathcona Outdoor Master Plan)***

(e) Significance

- local at present; Class 4 lake could be developed to take pressure off Half Moon Lake

(f) Suggested Use(s)

- Extensive recreation, (hiking or equestrian trail along channel)
- if suitable, the Class 4 lake could be used for motor boats since the waterfowl capability is only moderately good and the environmental sensitivity is relatively low

17. HALF MOON LAKE MELTWATER CHANNEL - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation, with motorboat use on the eastern lake (adjacent to Half Moon Lake).

(b) **Reasons**

- the lake west of Half Moon Lake has Class 4 recreation capability for family boating, family recreation lodging and viewing wetland wildlife.
- the remainder of the Channel has Class 5 recreation capability for hiking, nature study and viewing wetland and upland wildlife.
- environmental sensitivity is low (ESA Study).
- Class 3 capability for waterfowl and Classes 2 and 3 capability for ungulates.

(c) **Potential**

- possible trail along the Channel - equestrian trail could link Cooking Lake with Sherwood Park Natural Area and Fultonvale Equestrian facilities.
- educational/interpretive value (glacial landform features).
- proposed Strathcona Heritage Bike Pathway will intersect the channel at several points.

(d) **Problems**

- private land except for the Fultonvale School, etc.

(e) **Management Considerations**

- designation in the Regional Plan as a Conservation/Recreation Area.
- easement or access agreement for a trail to cross private land.

18. POLAR PARK - Background Information

(a) Physical and Biophysical Features

- part of the Cooking Lake Moraine
- northern portion more hilly - relief over 100 ft.
- extensive area approx. 1280 acres
- lake shoreland mainly forested

(b) CLI Capability Rating

(i)	Recreation:	Class 2 as an area exhibiting major, permanent, non-urban man-made structures of recreational interest, and for viewing wetland & upland wildlife
(ii)	Waterfowl:	Class 3 (north and west) Class 4 (remainder)
(iii)	Ungulates:	Class 2 (north and west) Class 3 (remainder)

(c) Existing Recreation Development

- wildlife enclosures, trail system, interpretive site, picnic grounds, concession

(d) Special Features or Considerations

- private commercial venture
- described in Travel Alberta's Touring Guide
- low environmental sensitivity
- the only Class 2 recreation area in the Region

(e) Significance

- regionally/provincially significant reserve for cold climate animals

(f) Suggested Use(s)

- Specialized outdoor recreational area (wildlife preserve), also used for extensive recreation

18. POLAR PARK - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - wildlife preserve and extensive recreation.

(b) **Reasons**

- existing commercial venture: regionally/provincially significant reserve for cold climate animals.
- the only CLI Class 2 recreation area in the Region.
- existing trail system, interpretive site and other facilities.

(c) **Potential**

- the ***Strathcona Outdoor Master Plan*** recommends greater promotion.
- described in Travel Alberta's Touring Guide.

(d) **Problems**

- area could be overdeveloped in future

(e) **Management Considerations**

- since much of the area is still "natural", designation as a Conservation/Recreation Area in the Regional Plan.

19. BIG ISLAND LAKE AND TWIN ISLAND LAKE - Background Information

(area: contour line boundary)

(a) **Physical and Biophysical Features**

- part of the Cooking Lake Moraine
- relief over >50 ft. near Twin Island Lake to over 100 ft. near Big Island Lake
- rolling terrain near Twin Island Lake; steep in places around Big Island Lake

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 (lakes) for family boating, organized camping and viewing wetland wildlife Class 5 (intervening land) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	Class 3

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- islands provide secure nesting sites
- family boating possible
- some CR development on east shore of Twin Island Lake
- lakes are proposed scenic bike stops along the proposed Strathcona Heritage bike pathway ***(Strathcona Outdoor Master Plan)***
- undisturbed shoreline is considered environmentally sensitive for production, moulting, staging and migration of waterfowl (ESA Study)

(e) **Significance**

- if developed could become a regionally significant area

(f) **Suggested Use(s)**

- Extensive recreation for motorized vehicles (snowmobiles) because of interesting terrain, low environmental sensitivity away from the lakeshores and moderate waterfowl and ungulate capability. Snowmobile use would not interfere with waterfowl production, etc.

19. BIG ISLAND LAKE AND TWIN ISLAND LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation for motorized vehicles (snowmobiles)

(b) **Reasons**

- extensive area with varied and interesting topography (Cooking Lake Moraine).
- CLI Class 5 recreation capability (for hiking, nature study, viewing wetland and upland wildlife).
- CLI Class 3 ungulate capability

(c) **Potential**

- Class 5 recreation capability, near the lakes, for organized camping - could act as a recreation focal point/gathering area for snowmobile users.
- proposed Strathcona Heritage Bike Pathway includes both lakes as scenic stops.
- the island in Big Island Lake is already County land.

(d) **Problems**

- undisturbed shoreline is considered environmentally sensitive for production, moulting, staging and migration of waterfowl - the islands provide secure nesting sites (Class 3 waterfowl lakes).
- little of the lakes' shoreland is in natural condition.
- private land.
- where slopes are steep, they may be susceptible to erosion.

(e) **Management Considerations**

- designate the area, in the Regional Plan, as a Conservation/Recreation Area.
- limit motorized vehicle use to snowmobiles so the effect on waterfowl will be minimal; during the remainder of the year, limit use to hiking and bicycling.
- trail construction/location to minimize disturbance of steep slopes.
- prohibit motorboat use.
- when subdivision occurs, MR should be consolidated as much as possible as large areas or as trail "corridors", especially around the lakes (potential for ER designation).

20. BRETONA POND - Background Information

(area: Crown land)

(a) **Physical and Biophysical Features**

- generally flat landscape
- small pond (approx. 40 acres) on approx. 160 acres of Crown Land
- headwaters of Mill Creek
- cleared for agriculture

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland and upland wildlife, and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 1
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development**

- interpretive site and viewing facilities

(d) **Special Features or Considerations**

- "disposition to Alberta Transportation has made the long-term status of this ESA uncertain" (ESA Study)
- need for fencing to restrict livestock
- "Buck for Wildlife" Project
- proposed for outdoor education programs with no boating permitted ***(Strathcona Outdoor Master Plan)***
- highly sensitive shoreline vegetation (ESA Study)

(e) **Significance**

- probably regional because of its proximity to Edmonton, its Class 1 waterfowl capability and its accessibility for waterfowl observation

(f) **Suggested Use(s)**

- Specialized outdoor recreation area (educational/interpretive site for nature study) as it is "an excellent site for waterfowl viewing" (ESA Study) close to large urban centres

20. BRETONA POND - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - educational/interpretive site for nature study.

(b) **Reasons**

- considered an "... excellent site for waterfowl viewing" close to large urban centres (ESA Study).
- Class 1 waterfowl capability.
- Class 2 ungulate capability
- Existing viewing facilities

(c) **Potential**

- "Buck for Wildlife" Project
- ***Strathcona Outdoor Master Plan*** proposes that Bretona Pond be used for outdoor education programs, with no boating allowed.
- 160 acres of Crown land.
- headwaters of Mill Creek.

(d) **Problems**

- highly sensitive shoreline vegetation.
- need for fencing to restrict livestock access.
- largely cleared for agriculture.
- "disposition to Alberta Transportation has made the long-term status of the ESA uncertain" (ESA Study).

(e) **Management Considerations**

- designation as a Conservation Area in the Regional Plan.

21. BOAG LAKE - Background Information

(area: Lake and immediate shoreland)

(a) **Physical and Biophysical Features**

- rolling terrain
- largely cleared for CR development
- surface area of lake approx. 300 acres

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and areas exhibiting cultural landscape patterns of agricultural or social interest
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	Class 2 (west shore) Class 3 (remainder)

(c) **Existing Recreation Development**

- CR development predominates

(d) **Special Features or Considerations**

- almost entirely surrounded by CR development
- the proposed Strathcona Heritage Pathway will partly encircle the lake ***(Strathcona Outdoor Master Plan)***
- ***Strathcona Outdoor Master Plan*** proposes a picnic park and market garden for the south shore, with hiking trails following Oldman Creek
- according to the ESA Study, "proximity to Sherwood Park creates possibilities for waterfowl viewing and wetland interpretation."

(e) **Significance**

- local, unless tied in with a regional trail system (e.g. proposed Strathcona Heritage bike pathway, Oldman Creek Trail)

(f) **Suggested Use(s)**

- Extensive recreation (bike path)

21. BOAG LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation - as part of an Oldman Creek Trail.

(b) **Reasons**

- Class 5 recreation capability for viewing wetland and upland wildlife.

(c) **Potential**

- included in the proposed Strathcona Heritage Bike Pathway.
- potential for trail (utilizing MR) from Boag Lake via Oldman Creek to the North Saskatchewan River ***(Strathcona Outdoor Master Plan)***.
- according to the ESA Study, "... proximity to Sherwood Park creates possibilities for waterfowl viewing and wetland interpretation".
- potential for habitat enhancement (ESA Study).

(d) **Problems**

- almost completely surrounded by multiple-parcel CR development.
- private land.

(e) **Management Considerations**

- several possibilities, including:

(i) restricting further CR development and keeping the remaining area as natural as possible;

(ii) allowing further CR development except in the proposed ***(Strathcona Outdoor Master Plan)*** picnic park;

(iii) because of the proximity of CR development, developing the remaining land intensively (in its natural state, the area has Class 5 recreation capability); or(serve)developing the remaining area (outside the CR development) as a waterfowl viewing and wetland interpretation centre (as proposed in the ESA Study).

22. BASELINE SLOUGH - Background Information

(a) **Physical and Biophysical Features**
- small (approx 25 acres) slough in a relatively flat agricultural area (The RDA) between Sherwood Park, Hwy. 14X and Baseline Road

(b) **CLI Capability Rating**

(i) Recreation: Class 6 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural and social interest

(ii) Waterfowl: Class 3

(iii) Ungulates: Class 2

(c) **Existing Recreation Development**
- trails

(d) **Special Features or Considerations**
- the area appears to attract numerous water birds, deer, small mammals and other wildlife
- very accessible for children, for nature study
- within an urban area

(e) **Significance**
- probably local because of small area involved, moderate waterfowl capability, and constraints imposed by proximity to major transportation routes and urban development - however, its proximity to large urban areas could make it regionally significant

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (educational/interpretive site for nature study)

22. BASELINE SLOUGH - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - educational/interpretive site for nature study.

(b) **Reasons**
- good waterfowl (Class 3)/wildlife (Class 2 ungulate capability) habitat within a urban area.
- very accessible for nature study by all age groups.

(c) **Potential**
- recognized by the County of Strathcona as an "environmentally interesting site".
- could be part of a "nature tour" including the Sherwood Park Natural Area, Bretona Pond and Boag Lake.

(d) **Problems**
- within the transportation/utility RDA.
- adjacent to major transportation routes (Baseline Rd. and Highway 14X) and power and pipeline rights-of-way.

(e) **Management Considerations**
- designation in the Regional Plan as a Nature Conservation Area.
- discussions with Alberta Transportation and other agencies involved to ensure reservation of the Baseline Slough and its immediate surroundings.

23. SHERWOOD PARK NATURAL AREA - Background Information

(area: Natural Area boundary)

(a) Physical and Biophysical Features

- hummocky moraine
- relatively undisturbed forest
- 160 acres of land

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural or social interest
(ii)	Waterfowl:	Class 3
(iii)	Ungulates:	Classes 2 & 3

(c) Existing Recreation Development

- trails

(d) Special Features or Considerations

- the area has been heavily impacted by ATV use and bush parties
- low environmental sensitivity since aspen/balsam poplar forest quick to recover from disturbance (however, wetlands in depressions could be more sensitive)
- a Provincial Natural Area since 1971
- contains white spruce
- proposed Strathcona Heritage bike pathway will cross the area

(e) Significance

- regional, because the great diversity of habitats close to urban centres "...offers potential for education, wildlife appreciation and nature interpretation" and is one of the better wildlife areas in western Strathcona County (ESA Study)

(f) Suggested Use(s)

- Extensive recreation with limited development and emphasis on educational/interpretive activities (e.g. self-guiding nature trail, interpretive sites/markers)

23. SHERWOOD PARK NATURAL AREA - Recreation Potential

(a) Recreation Uses

- Extensive recreation with limited development and emphasis on educational/ interpretive activities.

(b) Reasons

- Class 3 waterfowl capability and Classes 2 and 3 ungulate capability.
- 160 acres of relatively undisturbed forest, including white spruce forest.
- Class 5 recreation capability for viewing wetland and upland wildlife.

(c) Potential

- Provincial Natural Area since 1971
- Existing hiking trails and the Cooking Lake or "Old Edmonton Trail" crosses this area
- Contains a great diversity of habitats with good potential for education, wildlife appreciation and nature appreciation (ESA Study).
- The proposed Strathcona Heritage Bike Pathway will cross the Natural Area and link it with other outdoor recreation areas.
- Generally low environmental sensitivity, except for wetlands and possibly white spruce forest.
- recognized by the County of Strathcona as an "environmentally interesting site."

(d) Problems

- used for ATVs and for bush parties
- wetland and white spruce forest could be sensitive to disturbance

(e) Management Considerations

- designation in the Regional Plan as a Nature Conservation Area
- prohibit use of ATVs and other motorized vehicles - "policing" by local residents.
- continued use for wildlife observation and study (e.g. self-guiding nature trails, interpretive centre, markers, etc.)
- Sherwood Park Natural Area No. 212 (S.E. 11-52-23-4) is an Educational Natural Area established by Order-in-Council and encompasses approx. 156 acres. The County of Strathcona has a recreation lease from Forestry, Lands and Wildlife. The Public Lands Division of Alberta Forestry, Lands and Wildlife has the responsibility for site management of Provincial Natural Areas, with input from local planning agencies. A management Plan for this area has now been completed and approved.

24. STRATHCONA SCIENCE PARK AND ARCHAEOLOGICAL CENTRE - Background Information

(a) Physical and Biophysical Features

- urban park utilizing the steep slopes and terraces of the North Saskatchewan River Valley
- valley walls approx. 125 ft. high and steep

(b) CLI Capability Rating

(i)	Recreation:	Class 4 for a vantage point or area offering a superior view, for hiking and nature study or aesthetic appreciation and for vegetation possessing recreational value
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	Class 6

(c) Existing Recreation Development

- Science Centre (interpretive centre), Archaeological Centre (archaeological excavations and interpretive centre), concession, water access, cross-country ski trails, downhill ski facilities, picnic grounds and bicycle trails

(d) Special Features or Considerations

- low environmental sensitivity in terms of wildlife, but steep slopes susceptible to erosion
- unique man-made facility utilizing the outstanding features of the North Saskatchewan River Valley
- provincial park
- proposed link to other areas via the proposed Petroleum Way Bike Trail and a proposed equestrian trail ***(Strathcona Outdoor Master Plan)***

(e) Significance

- provincial because of its unique facilities

(f) Suggested Use(s)

- Specialized outdoor recreation with opportunities for both educational/interpretive activities and extensive recreation

24. STRATHCONA SCIENCE PARK AND ARCHAEOLOGICAL CENTRE - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area with opportunities for educational/interpretive activities, extensive recreation and intensive recreation

(b) **Reasons**

- Provincial Park.
- existing regionally/provincially significant park (described in Travel Alberta's Touring Guide).
- existing facilities: Science Centre, archaeological excavation and interpretive centre, water access, concession, cross-country ski trails, downhill skiing facilities, bicycle trails, picnic grounds.

(c) **Potential**

- ***Strathcona Outdoor Master Plan*** proposes to link the Science Park with other recreation areas by the proposed Petroleum Way Bike Trail.
- would be included in a Conservation/Recreation Area designation, in the Regional Plan, for this section of the North Saskatchewan River Valley.

25. POINTE-AUX-PINS SOAPHOLES - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**

- very scarce hydrogeological feature
- approx. 80 acres
- rolling terrain
- pasture land

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 2
(iii)	Ungulates:	Class 1

(c) **Existing Recreation Development:**

- none

(d) **Special Features or Considerations**

- considered rare and very sensitive (ESA Study)
- could be a significant feature, along with the Meander Scar and Oxbow Lake (#26) on a Pointe-aux-Pins nature trail
- excellent educational/interpretive value
- heavily altered and impacted by grazing cattle
- ***Strathcona Outdoor Master Plan*** recognizes the area as a conservation area and interpretive site

(e) **Significance**

- regional, possibly provincial, because of its rarity

(f) **Suggested Use(s)**

- Conservation (designation as a Provincial Environmentally Significant Area, if such legislation were adopted)

25. POINTE-AUX-PINS SOAPHOLES - Recreation Potential

(a) **Recreation Use(s)**
- Conservation.

(b) **Reasons**
- unique hydrogeological feature - "soapholes".

(c) **Potential**
- excellent educational/interpretive value
- a unique site on a potential Pointe-aux-Pins Creek nature trail.
- the ***Strathcona Outdoor Master Plan*** considers the area as a "conservation area" and "interpretive site".

(d) **Problems**
- private land.
- heavily altered and impacted by grazing cattle.
- heavy public use of the area could destroy the feature.

(e) **Management Considerations**
- designation as a Provincial Environmentally Significant Area (if such legislation were adopted).
- designation in the Regional Plan as a Nature Conservation Area.
- compensation or other trade-offs to private landowners to acquire and fence off the 80 acres.
- minimum development - for viewing and interpretation only e.g. a self-guiding boardwalk trail with interpretive signs, or restrict use to "study groups" (e.g. organized school groups).

26. MEANDER SCAR AND OXBOW LAKE - Background Information

(area: contour line boundary)

(a) **Physical and Biophysical Features**

- fluvial geomorphic features
- Oxbow Lake located on relatively flat terrace and backed by cliffs 75 - 100 ft. high
- over 1200 acres
- flat land used for crops

(b) **CLI Capability Rating**

(i)	Recreation:	Class 6 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural or social interest
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	predominantly Class 2 some Class 1

(c) **Existing Recreation Development: none**

(d) **Special Features or Considerations**

- one of the best and largest examples of this type of fluvial geomorphic feature
- valley walls are steep and susceptible to erosion
- excellent educational/interpretive value
- gravel workings adjacent to this site
- ***Strathcona Outdoor Master Plan*** proposes an "outdoor recreation park" with "interpretation of features and industry"

(e) **Significance**

- regional - if developed into an interpretive park, esp. in conjunction with a Pointe-aux-Pins nature trail

(f) **Suggested Use(s)**

- Specialized outdoor recreation area (educational/interpretive site for nature study) with potential for extensive recreation

26. MEANDER SCAR AND OXBOW LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - educational/interpretive site with potential for extensive recreation.

(b) **Reasons**
- potential educational/interpretive site.
- the ESA Study suggests development of a regional park.
- the ***Strathcona Outdoor Master Plan*** proposes an "outdoor recreation park" with "interpretation of features and industry".
- could be an attractive and interesting feature on a potential Pointe-aux-Pins Creek nature trail.
- the proposed Strathcona Heritage Bike Pathway will cross this area ***(Strathcona Outdoor Master Plan).***

(d) **Problems**
- gravel workings nearby.
- valley walls are steep and susceptible to erosion.
- private land.

(e) **Management Considerations**
- designation in the Regional Plan as a Conservation/Recreation Area.
- municipal acquisition of land.
- already partly in the North Saskatchewan River Valley RDA.

27. ASTOTIN - Background Information

(area: ESA boundary)

(a) Physical and Biophysical Features

- low relief sand dunes with a relatively non-incised creek
- estimated area approx. 2800 acres
- flooding hazard along Astotin Creek
- largely natural vegetation

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and interesting landform features (low relief sand dunes)
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	mainly a combination of Class 4 and Class 6

(c) Existing Recreation Development: none

(d) Special Features or Considerations

- ***Strathcona Outdoor Master Plan*** proposes non-motorized recreation with informal use of, and signage for, part of this area
- Astotin Provincial Natural Area
- the Astotin Area is zoned Heavy Industrial and is bordered on the south-east by the Scotford Complex
- highly diversified wildlife habitat (ESA Study)
- Astotin wetlands are considered to be highly environmentally sensitive
- ESA Study considers the area a regionally significant ESA

(e) Significance

- probably local at present since the topography is not outstanding and the area is located in a Heavy Industrial District

(f) Suggested Use(s)

- Extensive recreation because of the extensive area of interesting topography, largely natural vegetation and sensitive wetlands.

27. ASTOTIN - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- Class 5 recreation capability for viewing upland and wetland wildlife and interesting landform features (low-relief sand dunes).
- extensive area of largely natural vegetation and highly diversified wildlife habitat (ESA Study).

(c) **Potential**
- 2 1/4 quarter sections of Crown land including Astotin Provincial Natural Area.
- good potential for a wildlife trail through this area (from Astotin Lake in Elk Island National Park to the North Saskatchewan River).
- historic South Victoria (Telegraph) Trail passed through this area.

(d) **Problems**
- flooding hazard along Astotin Creek (non-incised creek).
- watercourse and wetlands are highly sensitive to disturbance (ESA Study).
- zoned Heavy Industrial in the County of Strathcona Land Use Bylaw.
- bordered on the southeast by the Scotford Complex.
- resource extraction: oil, sand and gravel.

(e) **Management Considerations**
- designate the area as a Nature Conservation Area in the Regional Plan.
- keep development to a minimum since the wetlands probably cannot handle heavy "traffic".
- Astotin Natural Area No. 491 (W 11-56-21-4) is a Conservation Natural Area established by Order-in-Council and encompasses approx. 320 acres.
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has responsibility for site management of Provincial Natural Areas, with input from the local planning agencies.

28. NORTHWEST OF BRUDERHEIM NATURAL AREA - Background Information

(area: Crown land)

(a) **Physical and Biophysical Features**
- 240 acres of flat land with largely natural vegetation
- relatively low-lying marshy area

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and interesting landform features (sand dunes)
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	a combination of Classes 4 and 6

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**
- significant oil and gas extraction
- Provincial Natural Area
- ***Strathcona Outdoor Master Plan*** proposes equestrian, hiking and skidoo trails and interpretation area
- Crown and County land
- not designated an environmentally sensitive area in the ESA Study

(e) **Significance**
- if developed as a snowmobile area, could be promoted as a regional outdoor area (and take pressure off other areas with higher environmental sensitivity)

(f) **Suggested Use(s)**
- Extensive recreation, including motorized vehicles (snowmobiles) because of the large area, low environmental sensitivity (assumed), location (in the north-east part of the Region where other, similar, areas have higher environmental sensitivity) and relatively low waterfowl and ungulate capability

28. NORTHWEST OF BRUDERHEIM NATURAL AREA - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation for motorized vehicles (snowmobiles, ATVs, dirtbikes).

(b) **Reasons**
- relatively extensive area with largely natural vegetation.
- Class 5 recreation capability for viewing wetland and upland wildlife and interesting landform features (sand dunes).
- low waterfowl (Class 5) and ungulate (combination of Classes 4 and 6) capability.

(c) **Potential**
- not included in the ESA Study (therefore, environmental sensitivity is assumed to be low).
- Provincial Natural Area and 80 acres of non-recreation/vacant County land.
- ***Strathcona Outdoor Master Plan*** proposes an equestrian, hiking, skidoo route trail to link with the North of Bruderheim Natural Area.
- in the northeast part of the Region where other, similar, areas have higher environmental sensitivity.

(d) **Problems**
- the land is relatively flat.
- oil and gas extraction is a major activity.

(e) **Management Considerations**
- designation in the Regional Plan as a Conservation/Recreation Area.
- develop and promote the area as an off-road vehicle area (to take the pressure off other, more environmentally sensitive, areas) or develop a trail system for snowmobiles in winter and horseback riding in summer.
- Northwest of Bruderheim Natural Area No. 70 is a Recreation Natural Area, established by Order-in-Council, consisting of N.W. 14, S. 22, N.E. and S.W. 23 and N.W. 24-56-21-4 (approx. 961 acres).
- the Public Lands Division of Alberta, Forestry and Wildlife has the responsibility, with input from local planning agencies, for site management of Provincial Natural Areas.

29. NORTH OF BRUDERHEIM NATURAL AREA - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**

- approx. 200 acres of low relief sand dunes mixed with wetland
- includes a "deeply incised portion of Beaverhill Creek" (ESA Study) with slopes >75 ft. high
- largely natural vegetation

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and interesting landform features
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	combination of Classes 4 and 6

(c) **Existing Recreation Development:** none, but heavily used by ATVs

(d) **Special Features or Considerations**

- vegetation sensitive to disturbance (ESA Study)
- heavily impacted by ATV users and sand leases
- Provincial Natural Area since 1963
- considered a regionally significant ESA (ESA Study)
- includes part of Beaverhill Creek Wildlife Corridor
- ***Strathcona Outdoor Master Plan*** proposes to link this area to the Northwest of Bruderheim Natural Area by an equestrian trail

(e) **Significance**

- local - if developed as a nature study/touring area, could be regional

(f) **Suggested Use(s)**

- Extensive recreation because of its environmental sensitivity, and its proximity to the Beaverhill Creek Wildlife Corridor

29. NORTH OF BRUDERHEIM NATURAL AREA - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation

(b) **Reasons**

- Class 5 for viewing wetland and upland wildlife and interesting landform features (low-relief sand dunes) .
- approximately 200 acres of largely natural vegetation - sand dunes mixed with wetlands.

(c) **Potential**

- the area has been included in a proposed equestrian and hiking trail ***(Strathcona Outdoor Master Plan)***.
- Provincial Natural Area since 1963.
- potential for a nature trail along Astotin Creek to include this area.

(d) **Problems**

- heavily impacted by ATV users and sand leases (ESA Study).
- the ***Strathcona Outdoor Master Plan*** proposes a skidoo trail, although the ESA Study considers the area regionally significant (includes part of the Beaverhill Creek wildlife corridor).

(e) **Management Considerations**

- designation in the Regional Plan as a Conservation/Recreation Area.
- restrict use of off-road vehicles.
- North of Bruderheim Natural Area No. 71 is an Educational Natural Area established by Order-in-Council; approx. 200 of the 1243 acres (S.E. 30 and LS11 of 30-56-20-4) are located in the County of Strathcona. In S.E. 30, only unimproved grazing is allowed. Renewal of the existing grazing permit may be permitted, but no new grazing dispositions will be allowed.
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has the responsibility for site management of Provincial Natural Areas, with input from local planning agencies.

30. FORT SASKATCHEWAN SKI HILL (RIVER RIDGE SKI CLUB) - Background Information

(a) **Physical and Biophysical Features**
- part of the valley slopes and terrace of the North Saskatchewan River Valley
- steep slopes approx. 50 ft. high

(b) **CLI Capability Rating**

(i)	Recreation:	Class 4 for hiking and nature study or aesthetic appreciation, access to water with capability for canoe tripping, and organized camping
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	Class 3W or Class 5

(c) **Existing Recreation Development**
- downhill skiing facilities (three slopes), chalet and rope tow

(d) **Special Features or Considerations**
- within an urban area

(e) **Significance**
- local, possibly regional, since there are relatively few downhill ski areas in the Region

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (downhill ski facility)

30. FORT SASKATCHEWAN SKI HILL (RIVER RIDGE SKI CLUB) - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area for intensive recreation (downhill skiing).

(b) **Reasons**
- downhill ski facility.

(c) **Potential**
- only ski hill in the northeast part of the Region.
- would be included in a Regional Plan Conservation/Recreation Area designation for this section of the North Saskatchewan River Valley

31. REDWATER SAND DUNES (THE "PINES") - Background Information
(area: ESA boundary)

(a) Physical and Biophysical Features

- extensive area (approx. 9000 acres) of sand dunes interspersed with numerous wetlands
- still a relatively natural area
- bordered by the North Saskatchewan River Valley on the south and the Redwater River Valley on the west; both valleys are important wildlife corridors

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and interesting landform features (sand dunes)
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	combination of Classes 6 and 5

(c) Existing Recreation Development: none, but area used by ATVs

(d) Special Features or Considerations

- one of the few large areas with recreation potential in the N.E. part of the Region
- includes the largest Provincial Natural Area in the M.D.
- heavily used by ATVs; popular local opinion supports ATV use
- sand dunes are highly sensitive to disturbance (ESA Study)
- significant oil and gas development

(e) Significance

- could be regionally significant because of its extensive area, largely natural vegetation, interesting landforms and proximity to the North Saskatchewan River Valley

(f) Suggested Use(s)

- Extensive recreation because of its interesting landforms, environmental sensitivity and extensive area. Because of the area's popularity with ATV users, perhaps the northern portion (away from the river valley wildlife corridors) could be set aside for ATV use

31. REDWATER SAND DUNES (THE "PINES") - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation, with perhaps a portion reserved for ATV and mountain bike use.

(b) **Reasons**

- extensive area of interesting and varied topography (sand dunes) and largely natural vegetation.
- Class 5 recreation capability for viewing wetland and upland wildlife and interesting landform features (sand dunes).
- much of the area has low waterfowl (Class 5) and ungulate (Classes 5 and 6) capability.
- already a popular area for ATV users.

(c) **Potential**

- one of the few large areas with recreation potential in the northeast part of the Region.
- includes the largest Provincial Natural Area in the M.D. of Sturgeon
- good potential for linkage with Redwater (via the Redwater River Valley) and the North Saskatchewan River Valley.
- the historic North Victoria (Carlton) Trail crossed through this area.

(d) **Problems**

- sand dunes are highly sensitive to disturbance (ESA Study).
- heavy use by ATV users - popular local opinion supports ATV use (ESA Study).
- heavy oil and gas development.

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- prepare a recreation management strategy or ASP for the sand dune area.
- discussions have been held between the Alberta Off-Highway Vehicle Association, the Natural and Protected Areas Section of the Public Lands Division of Alberta Forestry, Lands and Wildlife, and the volunteer stewards for this Natural Area concerning off-highway vehicle use.
- designate the north part of the sand dune area (away from the Redwater River and North Saskatchewan River Valley wildlife corridors) as "extensive recreation areas for motorized vehicles" for ATV use and mountain bike use (since this use is already locally popular).
- keep the remaining area for more "primitive" trails for hiking and cross-country skiing with a minimum amount of environmental impact.
- Redwater Natural Area No. 69 is an Educational Natural Area established by Order-in-Council and comprising 24 of 36 quarter sections of Crown land.
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has the responsibility for site management of Provincial Natural Areas, with input from local planning agencies.

32. CORONADO EAST AND LOSTPOINT LAKE - Background Information

(area: ESA boundaries and intervening land)

(a) Physical and Biophysical Features

- extensive, rolling sand dune area approx. 5700 acres with relatively flat land around Lostpoint Lake
- relief approx. 50 ft.
- wetlands in low lying areas between dunes
- Lostpoint Lake (surface area approx. 320 acres) lies in a relatively flat, wetland area
- largely natural area

(b) CLI Capability Rating

(i) Recreation: predominantly Class 5 for viewing wetland & upland wildlife and (in the sand dune area) interesting landform features

Class 6 (between lake and sand dunes) for viewing upland wildlife, cultural landscape patterns of agricultural or social interest and vegetation with recreational value

(ii) Waterfowl: Class 1 (Lostpoint Lake)
Class 5 (sand dune area)

(iii) Ungulates: Class 2 and 3 around Lostpoint Lake

combination of Class 6 and 4 in the sand dune area

(c) Existing Recreation Development: none

(d) Special Features or Considerations

- Ducks Unlimited waterfowl project
- such large dunes are rare in the M.D.
- considered to have high environmental sensitivity because of the Lake's Class 1 waterfowl capability, sensitive shoreline, generally slow vegetation recovery in the sand dune area and its value as an "excellent wildlife corridor" (ESA Study)
- some Crown land on east shore of lake
- large CR subdivision on the north-west shore of the lake

(e) Significance

- potentially regional because of the extensive area, Class 1 waterfowl capability (Lostpoint Lake) and interesting landforms

(f) Suggested Use(s)

- Extensive recreation, with further development around Lostpoint Lake kept to a minimum and any trail system in the sand dune area constructed to minimize habitat and slope damage

32. CORONADO EAST AND LOSTPOINT LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation

(b) **Reasons**

- considered an excellent wildlife corridor (ESA Study).
- Lostpoint Lake has Class 1 waterfowl capability and CLI Classes 2 and 3 ungulate capability.
- Coronado East is an extensive area with interesting and varied topography (large sand dunes which are rare in the M.D. of Sturgeon).
- Class 5 and 6 recreation capability for viewing upland and wetland wildlife and interesting landform features (sand dunes).
- sand dune area still has predominately natural vegetation.

(c) **Potential**

- one quarter section of Crown land (a candidate Provincial Natural Area) in the Coronado sand dune area.
- approx. two quarter sections of Crown land on the east shore of Lostpoint Lake.
- Lostpoint Lake is a Ducks Unlimited project.
- sand dune area has educational/interpretive value.
- the historic Athabasca Landing Trail passed close by (presently being developed as a historical recreation corridor.

(d) **Problems**

- the lake shoreline is sensitive to disturbance (ESA Study).
- vegetation in the sand dune area is very sensitive to disturbance (ESA Study).
- the Hamlet of Coronado and multiple-parcel CR development are located on the northwest shore.
- a municipal road runs across the north part of Lostpoint Lake.
- remaining land is in private ownership.

(e) **Management Considerations**

- designate the area as a Nature Conservation Area in the Regional Plan.
- prepare a recreation management strategy or ASP for this area.
- prohibit the use of motorized vehicles.
- restrict further CR development on Lostpoint Lake.
- create a nature trail system, perhaps similar to Chickakoo Lake Eco Trail.
- Coronado Natural Area No. 414 is a candidate Educational Natural Area of approx. 158 acres (S.W. 3-57-22-4)
- site management for Provincial Natural Areas is the responsibility of the Public Lands Division of Alberta Forestry, Lands and Wildlife, with input from local planning agencies.

33. LILY LAKE AREA - Background Information

(area: ESA boundaries for Lily Lake East, Lily Lake, Lily Lake Slough and Waybrook Lakes, plus intervening land)

(a) Physical and Biophysical Features

- low relief sand dunes north-east of Lily Lake, with relatively natural vegetation
- contains both wetland and dry land habitat
- much of the land around Lily Lake has been cleared
- Lily Lake is in a prominent glacial meltwater channel with moderately steep banks rising 50-75 ft.
- the lake is flanked by sloughs, including Waybrook Lakes

(b) CLI Capability Rating

(i)	Recreation:	Class 6 (Lily Lake shoreland) for viewing wetland wildlife Class 6 (in the sand dune area) for observing upland wildlife, vegetation with recreational value and cultural landscape patterns of agricultural and social interest Class 5 (remaining area) for viewing upland wildlife and interesting landform features and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	predominantly Class 5 (Lily Lake and sand dune area) some Class 6
(iii)	Ungulates:	Class 1 (Lily lake) Combination Classes 5 & 6 (sand dune area) some Class 2

(c) Existing Recreation Development

- Alberta Wildlife Park, Red Barn

(d) Special Features or Considerations

- the south-east shore of Lily Lake is already subdivided for intensive CR development
- site of the Alberta Wildlife Park (west shore of Lily Lake), a provincially recognized wildlife preserve
- shoreline and sand dune vegetation very sensitive to disturbance (ESA Study)
- Provincial Natural Area in the sand dunes area (part)
- Lily Lake is at the centre of a controversy over realignment of SR 651
- the historic Athabasca Landing Trail ran along the east shore of Lily Lake (remnants are still visible)

(e) Significance

- the Alberta Wildlife Park is provincially significant
- probably locally significant unless the Athabasca Landing Trail is completed and promoted as a regional recreation corridor

(f) Suggested Use(s)

- Extensive recreation in the sand dune area
- Specialized outdoor recreation facility (wildlife preserve)
- Extensive recreation (perhaps an equestrian trail) along Lily Lake, utilizing the historic Athabasca Landing Trail (ESA Study suggests Lily Lake has potential for a "tourist oriented interpretive centre")

33. LILY LAKE AREA (INCLUDING THE ALBERTA WILDLIFE PARK) - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation
- Specialized Outdoor Recreation Area - wildlife preserve.

(b) **Reasons**
- existing regionally/provincially significant reserve, predominately for exotic animals (described in Travel Alberta's Touring Guide).
- Lily Lake Area is an extensive area with interesting and varied topography, from glacial landforms (e.g. Lily Lake is in a glacial meltwater channel) in the southwest to sand dunes in the northeast.
- the sand dune area has largely natural vegetation.
- Lily Lake has CLI Class 1 ungulate capability.

(c) **Potential**
- there are visible remnants of the Athabasca Landing Trail which followed the east shore of Lily Lake (the Trail is presently being developed as an historical and recreational corridor) - potential for equestrian trails.
- there is a Provincial Natural Area in the sand dune area.
- the ESA Study considers Lily Lake to have the potential for a "tourist oriented interpretive centre" because of the combination of landforms, historic features, ungulate capability and existing wildlife preserve.

(d) **Problems**
- proposed realignment of Secondary Road 651 across Lily Lake has generated considerable controversy; an environmental study is currently underway.
- the southeast shore of Lily Lake is already subdivided for multiple-parcel CR development.
- shoreline vegetation and vegetation in drier parts of the sand dune area is sensitive to disturbance (ESA Study).
- remaining land is in private ownership.

(e) **Management Considerations**
- designate the area as a Conservation/Recreation Area in the Regional Plan.
- prepare a recreation management strategy or ASP for this area, with an equestrian trail system utilizing the historic Athabasca Landing Trail.
- Opal Natural Area No. 61 (of which approximately 320 acres is located in the M.D. of Sturgeon: W. 35-57-23-4) is a Recreation Natural Area established by Order-in-Council
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has responsibility for site management of Provincial Natural Areas, with input from the local planning agencies.

34. BON ACCORD NORTH - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**

- a long, low lying area (approx. 1280 acres) with sloughs, marshes, ephemeral streams and remnant forest

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing upland wildlife and interesting landform features and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	a combination of Classes 4 and 2
(iii)	Ungulates:	mainly Class 2, with some Classes 1, 5 & 6

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**

- considered by the ESA Study to be "one of the best combinations of terrain features, remnant aspen poplar forest and waterfowl habitat found in the M.D." with "excellent examples of glacial landforms"
- shorelines of ponds are highly sensitive to disturbance (ESA Study)

(e) **Significance**

- local - because of amount of wetland, high shoreline sensitivity to disturbance, patches of forest and proximity to agriculture

(f) **Suggested Use(s)**

- Extensive recreation, perhaps with an emphasis on educational/interpretive activities

34. BON ACCORD NORTH - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation, with an emphasis on educational/interpretive activities.

(b) **Reasons**
- Class 5 recreation capability for viewing upland wildlife and for hiking and nature study.
- an extensive area with a good combination of terrain features (glacial landforms), remnant forest and waterfowl habitat (ESA Study).
- some CLI Class 2 waterfowl capability - important for waterfowl production (ESA Study).
- some CLI Class 1 and 2 ungulate capability.

(c) **Potential**
- potential for development of an "Eco Trail" (nature trail) similar to that in Chickakoo Lake Recreation Area.

(d) **Problems**
- forest cover "patchy".
- shorelines of ponds have high sensitivity to disturbance (ESA Study).
- private land

(e) **Management Considerations**
- designate the area as a Conservation/Recreation Area in the Regional Plan.
- prepare a recreation management strategy or ASP for the area.

35. MANAWAN LAKE - Background Information

(area: ESA boundary and CLI Class 1S Waterfowl Capability)

(a) **Physical and Biophysical Features**

- medium-sized (surface area approx. 1800 acres) shallow lake in a flat, cleared, agricultural area

(b) **CLI Capability Rating**

(i)	Recreation:	Class 4 for viewing wetland & upland wildlife
(ii)	Waterfowl:	Class 1S
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**

- considered to have high environmental sensitivity because of its Class 1S waterfowl capability
- one of the few Class 4 recreation areas in the M.D.
- "Wetlands for Tomorrow" Lake
- has been the emergency water supply for the Village of Legal
- much of the shoreland is Crown Land

(e) **Significance**

- provincial, one of only three Class 1S waterfowl lakes in the Region and one of only 20 in the Province

(f) **Suggested Use(s)**

- Conservation (designation as a Provincial Conservation Area or Provincial Environmentally Significant Area if such legislation were adopted)

35. MANAWAN LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Conservation.

(b) **Reasons**

- one of only three Class 1S waterfowl lakes in the Region (one of only 20 in the Province).

(c) **Potential**

- "Wetlands for Tomorrow" Lake.
- relatively isolated.
- much of the immediate shoreland is Crown land (the lake, until recently, was the emergency water supply for Legal, but the Village is now on a Regional Water Line).

(d) **Problems**

- the land around the lake is cleared.
- focus of the Manawan Drainage District and ditch network (perhaps the potential for conflict is there).
- some of the shoreland is private.
- now the lake is no longer the emergency water supply for Legal, there may be less incentive to protect it.

(e) **Management Considerations**

- designation as a Provincial Environmentally Significant Area, if such legislation were adopted.
- designation in the Regional Plan as a Nature Conservation Area.
- minimum development - for wildlife viewing only.
- education and awareness program as to the lake's environmental value.

36. HERITAGE LAKE PARK - Background Information

(a) **Physical and Biophysical Features**
- developed park adjacent to Highway 2 and Morinville
- small lake
- some landscaping of surrounding shoreland
- area was approx. 27 acres, but realignment of Highway 2 may have reduced the acreage

(b) **CLI Capability Rating**

(i)	Recreation:	Class 6 for viewing upland and wetland wildlife and culturally landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development**
- stocked fishing lake, campground, day use facilities

(d) **Special Features or Considerations**
- requires more landscaping and buffering
- stocked lake (listed as a fishing lake in the Recreation Section of the Edmonton Journal)
- recent changes to Highway 2 and the adjacent Heritage Industrial Park have detracted from the site
- under Provincial jurisdiction
- low environmental sensitivity

(e) **Significance**
- regional - as a stocked lake, attracts people from around the Region

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (fishing lake)

36. HERITAGE LAKE PARK - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - stocked fishing lake

(b) **Reasons**
- well stocked lake under Provincial (Alberta Transportation) jurisdiction.

(c) **Potential**
- existing recreation facilities: day use and overnight facilities.
- listed as a fishing lake in the Recreation Section of the Edmonton Journal newspaper.

(d) **Problems**
- recent changes to Hwy 2 and the adjacent Heritage Industrial Park have detracted from the site.
- adjacent to the railway

(e) **Management Considerations**
- requires more landscaping and buffering.
- greater promotion.

37. CARDIFF PARK - Background Information

(a) **Physical and Biophysical Features**
- regional park developed on reclaimed coal mine area; former open pit coal mine now a lake
- approx. 480 acres

(b) **CLI Capability Rating**

(i)	Recreation:	Class 6 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 4
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development**
- developed park with day use and campground facilities, playground, shelters, ball diamonds, stocked (rainbow trout) fishing lake and golf course

(d) **Special Features or Considerations**
- the ESA Study suggests that "spoil piles and other remnant mining features could be developed into an interpretive centre run in conjunction with onsite regional park"
- municipal park

(e) **Significance**
- regional, because of the existing facilities and the potential for development of an historical interpretive site based on the coal mining operations (1902-1960)

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (urban park, stocked fishing lake and potential for an educational/interpretative centre)

37. CARDIFF PARK - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - intensive recreation

(b) **Reasons**

- existing regional park and stocked fishing lake.
- existing facilities: golf course, Cardiff Lake (fishing, boating), day use and overnight facilities, playground, shelters and ball-diamonds.

(c) **Potential**

- M.D. of Sturgeon land.
- opportunity for development of an interpretive centre based on the coal mining operations in the area 1902-1960 (ESA Study).
- listed as a fishing lake in the Recreation Section of the Edmonton Journal newspaper.
- greater promotion.

38. DEADMAN LAKE - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**

- small shallow lake (west "arm" is slough rather than lake) in a relatively flat, marshy area
- surface area approx. 575 acres

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland & upland wildlife and vegetation with recreational value
(ii)	Waterfowl:	Class 1 (west end) Class 3 (remainder)
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**

- according to the ESA Study, the lake has already been heavily impacted "...by forest removal and ongoing livestock grazing"; therefore, it has low environmental sensitivity
- Ducks Unlimited Project Lake

(e) **Significance**

- may have regional significance if "developed" as a bird-watching area, particularly in conjunction with Manawan Lake - otherwise, local

(f) **Suggested Use(s)**

- Specialized outdoor recreation area (educational/interpretive site for waterfowl study)

38. DEADMAN LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - educational/interpretive site for waterfowl study/observation.

(b) **Reasons**
- Class 1 waterfowl lake (west end of lake) in a Class 2 ungulate area.
- "Ducks Unlimited Project Lake".
- considered "an important complement to Manawan Lake" (ESA Study).

(c) **Potential**
- although relatively remote, could be promoted as an area for observing and studying waterfowl.
- one of the headwaters streams of the Rivière Qui Barre River - could be a trail destination.

(d) **Problems**
- private land, cleared for agriculture.
- heavily impacted"...by forest removal and ongoing livestock grazing"; therefore environmental sensitivity is low.

(e) **Management Considerations**
- designation as a Nature Conservation Area in the Regional Plan.
- minimal development - for waterfowl observation only (as at Bretona Pond).

39. SANDY LAKE AND THE CALAHOO UPLAND - Background Information

(area: CLI Classes 3, 4, and 5 shoreland around Sandy Lake, ESA boundaries and intervening land, excluding some CR development)

(a) Physical and Biophysical Features

- relief 50-75 ft. along the Sturgeon River; approx. 250 ft. in the Calahoo Upland
- Sandy Lake surface area almost 2800 acres; maximum depth - 14.8 ft.
- the Calahoo Upland is an extension of the Glory Hills, with steeper slopes in the south, fairly flat country along the Sturgeon River and flat to rolling land around Sandy Lake
- mainly hummocky dead-ice moraine
- large areas of woodland, including some white spruce

(b) CLI Capability Rating

(i)	Recreation:	Class 3 (Sandy Lake) for beach activities, swimming, family boating, family/recreation lodging and angling Class 4 (Sandy lake) for family/recreation lodging, family boating and angling Class 5 for angling (Sandy Lake only), viewing wetland and upland wildlife, and hiking and nature study or aesthetic appreciation (Calahoo Upland)
(ii)	Waterfowl:	Class 3 Class 4 (Sandy Lake) Class 5 (Sandy Lake south-east shore and Sturgeon River Valley)
(iii)	Ungulates:	Class 1 (Sandy Lake south-east shore mainly Class 2 and Class 3)

(c) Existing Recreation Development

- institutional camp grounds, boat launch facilities, resort cottage subdivisions, day use facilities and camping facilities, swimming areas, bow-and-arrow hunting area

(d) Special Features or Considerations

- the Summer Village of Sandy Lake is located along the north shore
- shoreline has high environmental sensitivity because of waterfowl habitat
- uplands have low environmental sensitivity because of agricultural clearing and forest quick to recover from disturbance
- Sandy Lake is a regionally significant fishery
- Sandy Lake is the best recreational lake in the M.D. and one of the few lakes in the Region with Class 3 recreation beaches
- an ASP for the lake has been in place since 1980
- the M.D. has a feasibility study regarding development of the south-east shore of Sandy Lake (mostly County land) as a "wilderness or recreation area"

(e) Significance

- regional, possibly provincial, because of its Class 3 beaches and regional fishery

(f) **Suggested Use(s)**

- Intensive recreation in Class 3 and some Class 4 areas. Preferably no motor boats or, at the least, restricted boating (because of fishing opportunities).
- Extensive recreation on Sandy Lake's Southeast Shore and the Calahoo Upland, perhaps accommodating motorized vehicles (snowmobiles, ATVs) and/or mountain bikes in the southern part of the Calahoo Upland because of low environmental sensitivity.

39. SANDY LAKE AND THE CALAHOO UPLAND - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation with perhaps motorized vehicle (snowmobiles) or mountain bike use in the south part of the Calahoo Upland.
- Intensive recreation on parts of the Sandy Lake shoreland

(b) **Reasons**

Extensive recreation:

- regionally significant fishery.
- an extensive area of largely natural woodland (including a relatively rare mixed wood forest on Sandy Lake's "southeast shore") and generally interesting and varied topography (north edge of the Glory Hills).
- Class 1 (Sandy Lake southeast shore), 2 and 3 ungulate capability.
- Calahoo Upland has Class 5 recreation capability for viewing upland and wetland wildlife, hiking and nature study.

Intensive recreation:

- Sandy Lake has Class 3 and 4 recreation areas for beach activities, swimming, family boating, family/recreation lodging and angling.
- Sandy Lake is large enough and deep enough for motorboats.

Extensive recreation for motorized vehicles:

- the Calahoo Upland is considered to have low environmental sensitivity (ESA Study).

(c) **Potential**

- the M.D. of Sturgeon has done a feasibility study regarding the development of the southeast shore of Sandy Lake as a "wilderness or recreation area"- there appears to be potential for developing a recreation area, on the three quarter sections of M.D. land, similar to the Chickakoo Lake Recreation Area (County of Parkland) or Strathcona Wilderness Centre (County of Strathcona).
- good linkage potential with the Sturgeon River Valley; the historic Lac Ste Anne Trail followed the Sturgeon River through this area.
- potential for a snowmobile (winter) and mountain bike (summer) trail system in the south part of the Calahoo Upland; here, the mixed forest has numerous agricultural clearings.

(d) **Problems**

- Sandy Lake southeast shoreline has high environmental sensitivity (ESA Study).
- under three municipal jurisdictions: The M.D. of Sturgeon and the Counties of Lac Ste. Anne and Parkland.
- recreation use conflicts: motorboats/waterskiing, fishing, swimming, waterfowl/wildlife.
- high recreation capability of parts of Sandy Lake could put development and use pressure on areas of lower recreation capability.
- steep slopes could be susceptible to erosion.
- the Calahoo Upland is mainly private land.

(e) **Management Considerations**

- designate Sandy Lake (except the southeast shore) and the Calahoo Upland as a Conservation/Recreation Area, and the southeast shore as a Nature Conservation Area, in the Regional Plan.
- an ASP has been in place for Sandy Lake since 1980; it may be time to review the plan.
- prepare a recreation management plan or ASP for the Calahoo Upland.
- restrict motorboats, if not in the south part of the lake, at least near the southeast shore.
- the M.D. of Sturgeon, the County of Lac Ste. Anne, the County of Parkland and the

Alexander Indian Reserve should work together to plan for this area (the lake and the upland).

- in the south part of the Calahoo Upland, a snowmobile (winter) and mountain bike (summer) trail system should not be too disruptive of waterfowl production (Class 2 waterfowl capability); care would have to be taken with respect to trail construction on slopes.
- a hiking/cross-country trail or Eco Trail might be best suited for the north part of the Calahoo Upland, especially around the three ponds (northwest of Calahoo) which, according to the ESA Study, have significant waterfowl production values.
- multiple-parcel CR subdivision should include MR "recreation corridors".

40. RIVIÈRE QUI BARRE SLOUGH - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**

- large (approx. 160 acres) slough adjacent to, and draining into Rivière Qui Barre River
- flat terrain
- cleared for agriculture

(b) **CLI Capability Rating**

(i)	Recreation:	Class 6 for viewing wetland & upland wildlife, vegetation with recreational value and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 4
(iii)	Ungulates:	Class 5 (because of excessive soil moisture) in an otherwise Class 2 area

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**

- Ducks Unlimited Habitat Improvement project
- fencing required to restrict livestock access to slough
- low environmental sensitivity
- could become another feature site in a "nature tour" including Big, Manawan and Deadman Lakes
- relatively close to St. Albert and Morinville for school education programs

(e) **Significance**

- probably local, but could become regionally significant if "developed" as a waterfowl observation lake (e.g. in conjunction with Ducks Unlimited habitat improvement)

(f) **Suggested Use(s)**

- Specialized outdoor recreation area (educational/interpretive site for wildlife study)

40. RIVIÈRE QUI BARRE SLOUGH - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - educational/interpretive site for wildlife study.

(b) **Reasons**
- Ducks Unlimited Habitat Improvement project - this could improve the slough's "natural" Class 4 waterfowl capability.

(c) **Potential**
- the slough could be a feature on a Rivière Qui Barre River Trail; part of a "Nature Tour" including Big Lake, Manawan Lake and Deadman Lake; and/or a waterfowl observation/study area similar to Bretona Pond (County of Strathcona).
- low environmental sensitivity.

(d) **Problems**
- shoreland cleared for agriculture.
- heavily impacted by livestock.

(e) **Management Considerations**
- designation as a Nature Conservation Area in the Regional Plan.
- minimal development for wildlife viewing only.
- fencing to restrict livestock access to slough.

41. VILLENEUVE GRAVEL PITS - Background Information

(area: ESA boundary)

(a) **Physical and Biophysical Features**
- approximately 2200 acres of flat, mostly cleared land, adjacent to the Sturgeon River

(b) **CLI Capability Rating**

(i)	Recreation:	Class 6 for viewing wetland & upland wildlife and cultural landscape patterns of agricultural, industrial and social interest
(ii)	Waterfowl:	Class 5
(iii)	Ungulates:	Class 2

(c) **Existing Recreation Development:** none

(d) **Special Features or Considerations**
- aggregate (Saskatchewan sands and gravels) mining has exposed "some of the finest exposures of Quaternary sediments deposited during the various stages of glaciation" (ESA Study)
- according to the ESA Study, the area has high educational and interpretive value and low environmental sensitivity
- could be an interesting feature on a Sturgeon River Trail

(e) **Significance**
- regional, because of the interesting exposures (there would be little point in developing this area as a local attraction only)

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (educational/interpretive site of geological interest)
- Extensive recreation for motorized vehicles

41. VILLENEUVE GRAVEL PITS - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - educational/interpretive site.
- Extensive Recreation for Motorized Vehicles

(b) **Reasons**

- aggregate mining has exposed "some of the finest exposures of Quaternary sediments during the various stages of glaciation" (ESA Study).
- low environmental sensitivity and already disturbed area

(c) **Potential**

- 120 acres are Crown land.
- high educational/interpretive value (ESA Study).
- could be a significant feature of a trail system along this section of the Sturgeon River.
- ESA Study suggests a potential regional park (perhaps similar to Cardiff Park) when the area is reclaimed.

(d) **Problems**

- most of the land is private.
- the exposures could eventually be destroyed or reburied.
- area of industrial extraction of aggregates.

(e) **Management Considerations**

- possibly designate the area as a Conservation/Recreation Area in the Regional Plan.
- encourage the M.D. of Sturgeon to utilize part of this area as a geological study area for school, university and other groups or eventually acquire land and develop a regional park built around preserved exposures.
- possibly reclaimed as an area for off-road vehicles, especially since environmental sensitivity is low.

42. GLADU LAKE AND GLADU LAKE UPLAND - Background Information

(area: ESA boundary plus additional land around the west end of the Lake)

(a) Physical and Biophysical Features

- on the edge of the Glory Hills, within the lower slopes
- one of the few moraine uplands in the M.D.
- the "gravel cap" makes the area unique (ESA Study)
- Gladu Lake is situated in a relic glacial meltwater channel
- extensive area (approx. 2560 acres), largely forested
- the lake surface area is approx. 400 acres
- east of the lake, the land is rolling (approx 75 ft. relief); west of the lake, the slope is steeper, rising >200 ft. to the south-west

(b) CLI Capability Rating

(i)	Recreation:	Class 5 (south and west of the lake) for viewing wetland & upland wildlife and for hiking and nature study or aesthetic appreciation Class 6 (Gladu Lake and north and east part) for viewing wetland and upland wildlife and (excluding Gladu Lake) cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 3 (south-west) Class 5 (lake and central portion) Class 6 (south-east)
(iii)	Ungulates:	mainly Class 2 Class 3 in the south-east

(c) Existing Recreation Development: none

(d) Special Features or Considerations

- relatively unique geological area
- low environmental sensitivity (ESA Study)
- private access to lake and gravel pits
- M.D. land in the north-east (one 1/4 section)
- major groundwater recharge area for the M.D.
- the lakeshore should be buffered from any development

(e) Significance

- local, but could become regionally significant if developed as an area for motorized vehicle use

(f) Suggested Use(s)

- Extensive recreation area for motorized vehicles (snowmobiles, trail bikes, ATVs) because of its varied and interesting terrain, its extensive area, its largely natural vegetation and low waterfowl capability. There is also good potential for educational/interpretive activities.

42. GLADU LAKE AND GLADU LAKE UPLAND - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation for motorized vehicles (snowmobiles, trailbikes, ATVs).

(b) **Reasons**

- an extensive area of unimpacted mixed wood forest and interesting terrain (the eastern edge of the Glory Hills).
- low environmental sensitivity (ESA Study) with mainly Class 5 and 6 waterfowl capability.

(c) **Potential**

- good potential for educational/interpretive activities (moraine upland with gravel cap, glacial meltwater channel).
- one quarter section of M.D. of Sturgeon land.

(d) **Problems**

- mainly private land with private access to the lake and gravel pits.
- jurisdiction divided between the County of Parkland and the M.D. of Sturgeon.
- major groundwater recharge area (ESA Study).
- steep slopes could be susceptible to erosion.

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- preserve vegetation to minimize surface run off.
- there is intensive CR subdivision immediately west of this area; if subdivision is proposed in the Gladu Lake Upland, MR (or ER if possible around the lake) should be taken on the basis of:
  (i) preserving and buffering the immediate shoreland for public use (with access);
  (ii) acquiring trail "corridors"; and
  (iii)"adding to" the existing quarter section of M.D. land.
- any trail construction should be done so as to minimize slope damage and disruption.

43. BIG LAKE - Background Information

(area: Big Lake Management Plan area)

(a) Physical and Biophysical Features

- large (approx. 4300 acres) shallow lake in a low lying, marshy area
- one steep, approx. 100 ft. high hill on the south-east shore
- much of the north and west shore is subject to flooding

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (immediate lake shoreland and marshy north and west shores) for observing wetland wildlife; also (along the south shore) for organized camping and family boating; also (at the outlet) for organized camping and canoe tripping Class 6 (remaining area) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 1S (lake and north and west shores) Classes 4-6 (remaining area)
(iii)	Ungulates:	Class 6 (marshy north and west shores) Classes 1 and 2 (remaining area)

(c) Existing Recreation Development

- golf course, 'primitive' trails, sports fields

(d) Special Features or Considerations

- a major (nature study, etc.) feature of St. Albert's proposed Red Willow Park
- hunting occurs in the area
- several quarter sections of M.D. land
- flood control lake on the Sturgeon River
- used for helicopter practice flights
- bordered by four municipalities, including 2 large urban centres
- Big Lake Management Plan adopted by municipalities
- high environmental sensitivity - one of Alberta's most important wetlands (ESA Study)

(e) Significance

- provincial, as it is one of only 20 Class 1S waterfowl lakes in the Province

(f) Suggested Use(s)

- Conservation in Class 1S areas (designation as a Provincial Conservation Area or Provincial Environmentally Significant Area if such legislation were adopted), with extensive recreation in other parts of the shoreland, especially focusing on educational/interpretive activities (nature study)

43. BIG LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Conservation (north and west shore).
- Extensive recreation (remaining shoreland).

(b) **Reasons**

- one of only three Class 1S waterfowl lakes in the Region (one of only 20 in the Province).

(c) **Potential**

- the Big Lake Plan stresses environmental conservation and the use of the area for "environmentally compatible" and educational/interpretive uses.
- St. Albert's Red Willow Park proposal focuses on Big Lake as a nature observation/interpretation site.
- very accessible to large numbers of people.
- potential for "linking" Big Lake with other natural areas (e.g. Manawan Lake, Wagner Bog, Clifford E. Lee Bird Sanctuary) in a "Nature Tour".
- could be a major, attractive feature on a Sturgeon River Valley Trail.

(d) **Problems**

- under four jurisdictions: the City of Edmonton, the City of St. Albert, the County of Parkland and the M.D. of Sturgeon.
- much of the shoreland is private land.
- incompatible uses: helicopter training, hunting.
- competing land uses: including industry, multiple-parcel CR development, formal recreation facilities (e.g. golf course).
- high voltage powerline at the east outlet is unaesthetic and dangerous to waterfowl.
- pressures for dredging and greater flow regulation could destroy marshland.

(e) **Management Considerations**

- the Big Lake Management Plan has been adopted/accepted.
- designation of those areas rated Class 1S for waterfowl as a Provincial Environmentally Significant Area (if such legislation were adopted).
- designation of the remainder of the shoreland as Conservation/Recreation Area in the Regional Plan.
- continuing public education to increase public awareness of the value of Big Lake.
- extensive recreation on the remaining shoreline to prevent interference with the lake and waterfowl.

44. MUIR LAKE - Background Information

(area: Crown land)

(a) Physical and Biophysical Features

- a 120 acre lake occupying a depression, with steep slopes to the south and west, and relatively flat land to the east, beyond the immediate, steep shoreline
- wooded area
- part of the Glory Hills

(b) CLI Capability Rating

(i) Recreation: Class 3 (lake and shoreland) for family/recreation lodging, angling and family boating

Class 5 (remaining area) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation

(ii) Waterfowl: Class 3

(iii) Ungulates: Class 5 (shoreland)
Class 2 (remaining area)

(c) Existing Recreation Development

- 'primitive' trails

(d) Special Features or Considerations

- motor boats could conflict with fishing opportunities
- has been considered one of the better (stocked) trout lakes in Alberta
- may be moderately environmentally sensitive, with steep slopes subject to erosion
- the only completely Class 3 recreation lake in the Region
- the Muir Lake Recreation Society (a non-profit organization made up of local residents) leases 21.96 acres from the Province (Forestry, Lands & Wildlife) - wanted Co. Parkland to take over lease, but Council refused
- the Rec. Society was organized to prevent intensive (esp cottage subdivision) recreation and power boats

(e) Significance

- regional, because of its Class 3 recreation capability for boating and angling

(f) Suggested Use(s)

- Extensive recreation, including non-motorized boating (because of its Class 3 recreation capability for angling) (perhaps Muir Lake and Bennett Lake could be developed along the same lines)
- There could be pressure to develop this lake for intensive recreation, including motor boats (proposals have been made for resort cottage subdivision) because of its high capability for boating and lodging, its low environmental sensitivity, its hilly, wooded shoreline and present lack of development.

44. MUIR LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation.

(b) **Reasons**

- approx. 360 acres of rolling to steep terrain, relatively undeveloped and largely wooded.
- the lake and shoreland have Class 3 recreation capability for family/recreation lodging, family boating and angling.
- Class 3 waterfowl capability.
- the remaining land area has Class 5 recreation capability for viewing wetland and upland (Class 2 upland capability) wildlife, hiking and nature study.

(c) **Potential**

- most of the area is under the Provincial Department of Lands and Forests.
- the lake is Class 3 for angling and has been stocked with trout (in 1959, the lake was considered one of the best stocked trout lakes in Alberta).

(d) **Problems**

- although the lake has Class 3 recreation capability for family boating, it also has Class 3 recreation capability for angling; motorboating and fishing can be conflicting uses, especially on such a small (approx. 120 acres) lake.
- environmental sensitivity unknown (however, the lake has Class 3 waterfowl capability and a steep shoreline).
- there could be pressure to develop this lake for intensive recreation because of its Class 3 capability for family boating and family/recreation lodging, its low environmental sensitivity, its hilly wooded shoreline and present lack of development.

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- prepare a recreation management strategy or ASP for the lake and the surrounding area, taking into account any environmentally sensitive aspects.
- assess the potential for conflict between motorboats and fishing.
- the land is presently leased from the Province by the Muir Lake Recreation Society (a non-profit organization of local residents). The County of Parkland might want to consider taking over the lease and developing a "wilderness centre" similar to the Strathcona Wilderness Centre, with overnight lodging, canoe and rowboat rentals and trails, with the emphasis on nature appreciation.

45. GLORY HILLS - Background Information

(area: least developed in terms of CR subdivision - portion including as many lakes as possible)

(a) Physical and Biophysical Features

- one of the highest and most interesting topographic areas in the Region
- rolling, "knob and kettle" terrain i.e. numerous small hills, 50-100 ft. high, interspersed with small "kettle" lakes and sloughs
- much of the area is wooded, especially the northern portion (centred on Chickakoo Lake)
- the largest lakes are Mere Lake and Cameron Lakes (approx. 130 acres each), followed by Chickakoo Lake (approx. 65 acres), Kettle Lake (approx. 60 acres), Glory Lake (approx. 45 acres), Byers Lake (approx. 40 acres) and Gerharts Lake (approx. 120 acres). There are numerous small unnamed lakes and sloughs.

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Chickakoo Lake) for family/recreation lodging, family boating and viewing wetland wildlife Class 4 (Mere Lake) for family/recreation lodging, family boating and angling Class 4 (Cameron Lakes) for viewing wetland and upland wildlife Class 4 (remaining lakes) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation Class 5 (northern part) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	predominately Class 1 some Class 3 (east and north-east) some Class 5 (north-west)
(iii)	Ungulates:	predominantly Class 2 small areas of Classes 1 and 3

(c) Existing Recreation Development

- Chickakoo Lake Recreation Area (ecotrail, day use area, picnic sites, boat launch, washrooms, nature interpretation area, parking - trail also used for mountain bike races); Kettle Lake Eco Trail; Glory Hills cross-country ski trails

(d) Special Features or Considerations

- approximately five quarter sections in the area under consideration are County land
- designated for country residential development in the County's LUB
- a large proportion of the Glory Hills area has already been subdivided for CR
- Cameron Lakes has the only Great Blue Heron colony in the Region
- environmental sensitivity is probably high, especially around lakes and sloughs (Class 1 waterfowl capability)
- Mere Lake has Class 4 capability for fishing; a maximum boating speed of 12 km per hour has been established

(e) Significance

- regional, possibly provincial if promoted, because of its varied and interesting topography, numerous lakes, excellent opportunities for viewing waterfowl and boating opportunities; this is one of the largest Class 4 recreation areas in the Region

(f) Suggested Use(s)

- Extensive recreation with an emphasis on nature study and appreciation, and including non-power boating on Mere and Chickakoo Lakes.

Note: see also **54. Chickakoo Lake Recreation Area**

45. GLORY HILLS - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- large area of interesting and varied topography, numerous small lakes and areas of natural woodland.
- Class 1 waterfowl capability.
- mainly Class 2 ungulate capability.

(c) **Potential**
- the existing Chickakoo Lake Recreation Area (three quarter sections of County land) with "Eco Trails" around Chickakoo Lake and Kettle Lake is becoming increasingly popular, both for hiking/walking/cross-country skiing and for mountain bikes.
- Mere Lake and Chickakoo Lake have capability for family boating.
- other trails (e.g. the Glory Hills cross-country ski trails) are in the area.
- subdivision for multiple-parcel CR development in the Glory Hills provides opportunities for:
  - (i) acquiring MR or
  - (ii) taking cash-in-lieu-of to acquire MR where it is most desirable in this area.

(d) **Problems**
- A proposal to create a Provincial Park in the Glory Hills was rejected by the Provincial Government.
- environmental sensitivity is probably high because of the lakes and sloughs, high waterfowl capability and steep slopes which may be susceptible to erosion if cleared.
- Mere Lake and Chickakoo Lake's Class 4 recreation capability for family boating may result in pressure for motorboat use (although this has not occurred to date).
- much of the land is private.
- the Glory Hills area is zoned for CR development in the County of Parkland's Land Use Bylaw, and is becoming more and more fragmented by multiple-parcel CR development.
- there is pressure to provide for non-compatible outdoor recreation activities in Chickakoo Recreation Area (e.g. walking trails versus equestrian trails).

(e) **Management Considerations**
- designate the area as a Conservation/Recreation Area in the Regional Plan.
- a recreation management plan or ASP should be done for the whole Glory Hills area, with emphasis on MR and ER (especially around lakes) as recreation corridors and consolidated parcels.
- easements or rights-of-way should be negotiated for recreation corridors across private land.
- motorboat use should be prohibited on lakes in this area.
- development of a separate equestrian trail as an alternative to equestrian use in Chickakoo Recreation Area.
- development of part of the Calahoo Upland and/or the Gladu Lake Upland as alternative areas for extensive motorized vehicle use.

Note: see also **54. Chickakoo Lake Recreation Area**

46. HUBBLES LAKE - Background Information

(area: CLI Class 4 n/y/w Recreation Capability)

(a) Physical and Biophysical Features

- 128 acre lake in the Glory Hills hummocky dead-ice moraine
- shoreland largely cleared for CR development
- average depth of lake 40 ft. (used for scuba diving)

(b) CLI Capability Rating

(i) Recreation: Class 4 for family/recreation lodging, family boating and viewing wetland wildlife

(ii) Waterfowl: Class 1

(iii) Ungulates: Class 2

(c) Existing Recreation Development

- resort cottage development, boat launch facilities, Hubbles Lake Resort and Campground (trailer park, showers, playground, boat launch facilities, beach for swimming and fishing area)

(d) Special Features or Considerations

- almost completely surrounded by CR development
- Class 4 recreation lake for boating
- probably low environmental sensitivity (in spite of high waterfowl and ungulate capability) because of existing development

(e) Significance

- probably regional in the sense that cottage owners are probably from around the Region. However, the existing development probably limits the lake's potential for further public development. (This lake was not identified by the County as a regionally significant outdoor recreation area.)

(f) Suggested Use(s)

- Intensive recreation, with motor boat use on the lake. Existing CR development may make water access difficult for non-landowners.

46. HUBBLES LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Intensive recreation with motorboat use on the lake.

(b) **Reasons**
- although the lake has only Class 4 recreation capability (for family/recreation lodging and family boating), the lake is already intensively developed and used.
- the lake has a surface area of approx. 128 acres, a max. depth of 90 ft. and an average depth of 40 ft.

(c) **Potential**
- a very deep lake; one of the few lakes in the Region suitable for boating.
- also used for scuba diving.

(d) **Problems**
- almost completely surrounded by multiple-parcel CR subdivision; this could make water access difficult for non-landowners.
- Class 1 waterfowl lake (although development may have reduced the lake's waterfowl value).
- as a relatively small lake, it could be overused.

(e) **Management Considerations**
- designate the area as a Conservation/Recreation Area in the Regional Plan.
- acquire public land or MR to maintain public access to the lake.
- if remaining undeveloped areas still have high waterfowl capability, they should be protected.

47. WAGNER NATURAL AREA (WAGNER BOG) - Background Information
(area: Natural Area boundary)

(a) Physical and Biophysical Features
- 320 acres of flat land with diverse and unique habitats (fens, marl ponds, muskeg forest, willow swamp, upland woods and meadows)

(b) CLI Capability Rating

(i)	Recreation:	Class 6 for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	combination of Classes 3 & 2
(iii)	Ungulates:	mainly Class 3 some Class 2

(c) Existing Recreation Development
- self-guiding (in some places, a boardwalk) trail, enclosed picnic site

(d) Special Features or Considerations
- the area is dependent on groundwater recharge areas outside the Natural Area; this recharge area is threatened by proposed highway construction adjacent to the Natural Area's east boundary
- Provincial Natural Area under the "care" of the Wagner Natural Area Society
- excellent educational/interpretive opportunities for nature study because of the diverse and unique habitats, unusual plants (e.g. orchids, old tamaracks), birds and insects
- high environmental sensitivity due to the delicate habitats and unusual species
- close to large urban centres

(e) Significance
- provincial, because of the unique habitats, flora and fauna (Could have national significance because of wetland research.)

(f) Suggested Use(s)
- Conservation, as an educational/interpretive site for nature study. Could be linked with Big Lake, the Devonian Botanic Gardens, Clifford E. Lee Bird Sanctuary, etc. as part of a "nature tour."

47. WAGNER NATURAL AREA (WAGNER BOG) - Recreation Potential

(a) **Recreation Use(s)**

- Conservation

(b) **Reasons**

- a rare combination of habitats (e.g. marl ponds) and unique flora (e.g. orchids, old tamaracks) and fauna (e.g. certain insects).

(c) **Potential**

- existing Provincial Natural Area, becoming nationally known.
- excellent educational/interpretive site for nature study, very accessible to many people and with an existing, self-guiding trail.
- strong support from local and other residents (Wagner Natural Area Society).
- potential for a "Nature Tour" linking the Wagner Bog with nearby natural areas (e.g. Big Lake, Clifford E. Lee Bird Sanctuary).

(d) **Problems**

- high environmental sensitivity.
- the major water source for the bogs are springs on adjacent, privately owned land.
- proposed roadway construction adjacent to the area threatens the whole area.

(e) **Management Considerations**

- designation as a Provincial Environmentally Significant Area (if such legislation were adopted)
- designate the area as a Nature Conservation Area in the Regional Plan.
- settle the road construction problem once and for all by relocating the proposed road.
- Provincial and perhaps private (donations) funding to acquire the groundwater recharge area and incorporate it into the conservation area.
- Wagner Natural Area No. 142 is an Educational Natural Area established by Order-in-Council. The original 320 acres in N.W. 7-53-26-4 has been supplemented by 36 acres in Pt. N.W. 8-53-26-4 (Lot 14, Plan 3632 RS) purchased by Alberta Forestry, Lands and Wildlife.
- site management of Provincial Natural Areas is the responsibility of the Public Lands Division of Alberta Forestry, Lands and Wildlife, with input from local planning agencies.

48. DEVON SAND DUNES - Background Information

(area: CLI Class 2 Waterfowl Capability)

(a) **Physical and Biophysical Features**
- extensive area of low relief sand dunes (relief 25 ft. ±)
- largely wooded
- numerous sloughs of various sizes and low lying wetland areas
- interesting sand dune area includes both longitudinal and parabolic dunes

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland and upland wildlife and interesting landform features
(ii)	Waterfowl:	Class 2
(iii)	Ungulates:	mainly Class 6 with some Class 3 and Class 1 (east end of area)

(c) **Existing Recreation Development**
- bird sanctuary and botanical gardens

(d) **Special Features or Considerations**
- the Devonian Botanic Gardens & Clifford E. Lee Nature Sanctuary are both located within this area
- much of the area has already been subdivided for CR development (Zoned CR in the County's LUB)
- best waterfowl area in the south-west part of the Region

(e) **Significance**
- could have regional significance if developed because of its extensive area of interesting and varied topography and its relatively high waterfowl capability

(f) **Suggested Use(s)**
- Extensive recreation, with some allowance (away from the major wetland areas) for motorized vehicles (ATVs, snowmobiles) and mountain bikes (snowmobiles should not interfere with waterfowl production).

Note: see also **49. University of Alberta Devonian Botanic Gardens**
50. Clifford E. Lee Nature Sanctuary

48. DEVON SAND DUNES - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation with some accommodation for motorized vehicles.

(b) **Reasons**

- an extensive area of varied and interesting topography (sand dunes) and largely natural vegetation.
- one of the few Class 2 waterfowl areas in the southeast part of the Region.
- Class 5 recreation capability for viewing wetland and upland wildlife and interesting landform features.

(c) **Potential**

- area includes the Devonian Botanic Garden and the Clifford E. Lee Bird Sanctuary.
- subdivision for CR development provides opportunities for acquiring MR (or possibly ER) or cash-in-lieu-of to acquire MR where it is most desired.
- potential for educational/interpretive activities (e.g. an interpretive centre) because of the area's waterfowl capability and landform features.

(d) **Problems**

- the area is zoned for CR development in the County of Parkland's Land Use Bylaw.
- much of the area has already been subdivided for multiple-parcel CR development.
- no ESA Study done at present, but lakes and sloughs are probably sensitive to disturbance.
- private land except for part of one quarter section of Crown land.

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan (except the Clifford E. Lee Nature Sanctuary which should be designated as a Nature Conservation Area).
- restrict development around lakes and preserve lake shoreland for a nature trail.
- prepare a recreation management strategy or ASP, including consolidation of MR into large areas or recreation corridors, and protection of sensitive shoreland.
- if motorized vehicles are permitted (e.g. snowmobiles, ATVs), their use should be restricted in the central part of the area (around the Clifford E. Lee Bird Sanctuary and the nearby lakes).

Note: see also **49. University of Alberta Devonian Botanic Gardens**
50. Clifford E. Lee Nature Sanctuary

49. UNIVERSITY OF ALBERTA DEVONIAN BOTANIC GARDENS - Background Information

(a) **Physical and Biophysical Features**
- approx. 200 acres within the Devon Sand Dunes Area
- low relief area

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland and upland wildlife and interesting landform features (sand dunes)
(ii)	Waterfowl:	Class 2
(iii)	Ungulates:	mainly Class 6 some Class 3

(c) **Existing Recreation Development**
- botanical gardens showcase various plants and habitats such as The Herb Garden, the Native People's Garden and the Alpine Garden; nature trails, picnic area, gift shop/concession

(d) **Special Features or Considerations**
- botanical gardens for nature study and viewing (e.g. U. of A. Botany courses)
- owned by the Governors of the U. of A.
- close to large urban centres
- as formal botanical gardens, the area probably has low environmental sensitivity

(e) **Significance**
- provincial (described in Travel Alberta's Touring Guide) as a specialized facility

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (botanical gardens) for nature study and observation

49. UNIVERSITY OF ALBERTA DEVONIAN BOTANIC GARDENS - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area - botanical gardens.

(b) **Reasons**
- a regionally/provincially significant botanical collection with show gardens, nature and exotic species, existing trails, etc.

(c) **Potential**
- described in Travel Alberta's Touring Guide.
- could be linked with other natural areas (e.g Clifford E. Lee Bird Sanctuary, Wagner Bog) in a "Nature Tour".
- the land belongs to the University of Alberta and is used for educational/interpretive activities (nature study).

(d) **Management Considerations**
- this area should be included in a Conservation/Recreation Area designation for the Devon Sand Dune Area.

50. CLIFFORD E. LEE NATURE SANCTUARY - Background Information

(a) **Physical and Biophysical Features**
- 320 acres within the Devon Sand Dunes Area
- includes several sloughs of various sizes
- area of low relief

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for viewing wetland and upland wildlife and interesting landform features (sand dunes)
(ii)	Waterfowl:	Class 2
(iii)	Ungulates:	mainly Class 6 some Class 3

(c) **Existing Recreation Development**
- bird sanctuary; self-guiding nature trail (boardwalk)

(d) **Special Features or Considerations**
- Provincial bird sanctuary
- close to large urban centres
- educational/interpretive value (already used by local school classes)
- probably high environmental sensitivity because of wetlands and relatively high waterfowl capability

(e) **Significance**
- regional because of its bird sanctuary status. Could be provincial, especially if tied in with other nature study areas such as Wagner Bog, Big Lake and The Devonian Botanic Gardens

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (bird sanctuary)

50. CLIFFORD E. LEE NATURE SANCTUARY - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - bird sanctuary

(b) **Reasons**

- already designated as a bird sanctuary with a self-guiding trail.
- one of the few "good" (Class 2) waterfowl areas in the southwest part of the Region.

(c) **Potential**

- excellent educational/interpretive value.
- potential for linkage with other important natural areas (e.g. Devonian Botanic Gardens, Wagner Bog) in a "Nature Tour".
- very accessible

(d) **Problems**

- in an area of multiple-parcel CR development.
- there may be incompatible recreation use of ATVs, dirtbikes, etc.

(e) **Management Considerations**

- designation as a Nature Conservation Area in the Regional Plan.
- prohibit use of motorized vehicles in or near the area.
- land has been purchased adjacent to the Sanctuary by Alberta Forestry, Lands and Wildlife; this may provide a measure of protection from incompatible land uses outside the boundaries of the Sanctuary.

51. CAPITAL CITY RECREATION PARK (EDMONTON) - Background Information

(a) Physical and Biophysical Features

- there is still a large proportion of natural vegetation especially on the valley walls
- within the North Saskatchewan River Valley
- unitizes the slopes, terraces and floodplain of the river
- river valley approx. one mile wide (1 1/2 miles wide downstream of the Clover Bar R. R. bridge) with valley walls averaging 200 ft. high
- in places, the valley walls form sheer cliffs; in most places the slopes are highly susceptible to erosion and slumping

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (in various locations along the river) for organized camping; viewing upland wildlife, vegetation with recreational value and interesting landform features; angling; canoe tripping; hiking and nature study or aesthetic appreciation; vantage points with superior views; and, in one location, downhill skiing
(ii)	Waterfowl:	Class 6 (not rated within the then-urban area)
(iii)	Ungulates:	Although urban areas are not rated on the CLI ungulate capability map, the valley south of the 1972 City limits was rated Class 3W; the valley north-east of the 1972 City limits was rated Class 6, with a short reach of Class 3W

(c) Existing Recreation Development

- urban parks (picnic areas, playgrounds, sports fields, etc.); bike paths, hiking/cross-country ski trails; golf courses; fishing areas; boat launch areas; downhill skiing (Connors Hill); cultural and historic sites; viewpoints; scenic roads; nature trails, etc.

(d) Special Features or Considerations

- major urban park utilizing the City's urban resources and the Region's most outstanding physical feature
- could eventually be part of a regional trail system

(e) Significance

- regional significance - also used by provincial, national and international visitors to Edmonton

(f) Suggested Use(s)

- Specialized outdoor recreation area incorporating everything from recreation facilities and formal parks to "primitive" trails

51. CAPITAL CITY RECREATION PARK (EDMONTON) - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area incorporating many types of recreation activities from intensive recreation (e.g. downhill skiing and formal parks) to extensive recreation ("primitive" trails, etc.).

(b) **Reasons**

- regionally/provincially significant urban park utilizing the North Saskatchewan River Valley.
- numerous and varied facilities from hiking trails to historical/cultural sites.

(c) **Potential**

- described in Travel Alberta's Touring Guide as "Canada's largest stretch of urban parkland".
- part of the area is within the North Saskatchewan River Valley RDA.
- great potential to be part of a continuous regional trail system following the river valley.
- recreation development along the river valley is continuing, with trails and other facilities under construction or being considered (such as an equestrian centre in the Horse Hills in northeast Edmonton).

(d) **Problems**

- conflicting land uses and non-recreation development pressure.
- steep slopes are susceptible to erosion and there is a great deal of development, both recreation and non-recreation, on the flood plain.
- demands for all types of recreation opportunities may put a strain on the natural environment and existing facilities.

(e) **Management Considerations**

- designation in the Regional Plan as a Conservation/Recreation Area.
- the City of Edmonton has prepared plans and strategies for the river valley and its tributaries, within City boundaries.
- examine the possibility of a regional trail system following the river valley across the whole Region.
- much of the River Valley is within the Provincial RDA
- the City of Edmonton's ***North Saskatchewan River Valley Area Redevelopment Plan*** (Bylaw No. 7188) includes the following goals:
  - to ensure preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System;
  - to establish a public metropolitan recreation area; and
  - to provide the opportunity for recreational, aesthetic and cultural activities in the Plan for the benefit of Edmontonians and visitors to Edmonton.

  The Plan also includes the following objectives:
  - to provide park, open space and a variety of recreation, educational and cultural uses;
  - to provide metropolitan recreation and conservation areas
  - to provide a pedestrian movement network, and other non-motorized vehicular networks including the provision of River and Ravine crossings, throughout the Plan area;
  - to promote the conservation and rehabilitation of archaeological, paleontological, architectural and historic resources within the open space system;
  - to establish the River Valley and Ravine System protection area; and
  - to consider environmental factors when planning for use in the River Valley.

  Specific policies in the Plan include:
  - the preservation and enhancement of natural resource areas for recreational, scenic and ecological purposes; and
  - the identification of environmentally sensitive and hazardous lands through a detailed resource management approach.

52. CONNORS HILL SKI HILL (EDMONTON SKI CLUB) - Background Information

(a) **Physical and Biophysical Features**
- within the North Saskatchewan River Valley
- utilizes the approx. 200 ft. high valley wall and terraces

(b) **CLI Capability Rating**

(i) Recreation: Class 4 for organized camping, canoe tripping and angling

(ii) Waterfowl: (not classified on CLI maps - probably Class 6)

(iii) Ungulates: unknown (not classified on CLI maps)

(c) **Existing Recreation Development**
- downhill ski facility (rope tows and t-bars, change hut, snowmaking machine, etc.)

(d) **Special Features or Considerations**
- part of the extensive recreation development of the river valley within Edmonton
- one of the few (6 in total) downhill ski areas in the Edmonton Region

(e) **Significance**
- regional, because of the relative scarcity of downhill ski areas - but may be used most heavily by local residents

(f) **Suggested Use(s)**
- Specialized outdoor recreation area (downhill ski facility)

52. CONNORS HILL SKI HILL (EDMONTON SKI CLUB) - Recreation Potential

(a) **Recreation Use(s)**
- Specialized Outdoor Recreation Area for intensive recreation (downhill skiing).

(b) **Reasons**
- downhill ski facility utilizing the North Saskatchewan River Valley.

(c) **Potential**
- part of the intensive/extensive recreation development of the river valley within Edmonton.
- one of the few downhill ski areas in the Region.
- would be included in a Conservation/Recreation Area designation in the Regional Plan for this section of the North Saskatchewan River Valley.

53. SNOW VALLEY SKI HILL (EDMONTON) - Background Information

(a) **Physical and Biophysical Features**

- in the Whitemud Creek Valley
- utilizes the slopes and terraces of Whitemud Creek (valley walls >100 ft. high)
- surrounding area predominantly natural vegetation

(b) **CLI Capability Rating**

(i)	Recreation:	Class 4 for organized camping, vegetation with recreational value and viewing upland wildlife
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	Class 3W

(c) **Existing Recreation Development**

- downhill ski facilities (rope tows and t-bars, change hut/concession); hiking/cross-country ski trails; camp grounds; picnic area; playground; showers

(d) **Special Features or Considerations**

- one of only 6 downhill ski areas in the Edmonton Region
- utilizes the scenic Whitemud Creek Valley
- Class 3 winter range for moose, elk and deer

(e) **Significance**

- may be regional, but probably is more heavily used by local residents

(f) **Suggested Use(s)**

- Specialized outdoor recreation area (downhill ski facility), with associated extensive recreation facilities for hiking, cross-country skiing and camping.

53. SNOW VALLEY SKI HILL (EDMONTON) - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area for both intensive (downhill skiing) and extensive (trails) recreation.

(b) **Reasons**

- downhill ski facility utilizing the Whitemud Creek Ravine.
- recreation area with day use and overnight facilities, and hiking/cross-country ski trails.

(c) **Potential**

- the Waskahegan Trail passes through this area.
- part of the intensive/extensive recreation development of the river valley within Edmonton.

(d) **Problems**

- too many demands for too many types of recreational activities.

(e) **Management Considerations**

- would be included in a Conservation/Recreation Area designation, in the Regional Plan, for Whitemud Creek.
- the City of Edmonton has prepared a recreation development strategy for Whitemud and Blackmud Ravines ***(Whitemud and Blackmud Ravines Trails Development Plan)***.

54. CHICKAKOO LAKE RECREATION AREA - Background Information

(a) Physical and Biophysical Features

- one of the highest and most interesting topographic areas in the Region
- rolling "knob and kettle" terrain i.e. numerous small hills or "knobs", 50 - 100 ft. high, interspersed with small "kettle" lakes or sloughs
- largely wooded (Aspen Parkland) and basically undisturbed
- Chickakoo Lake is approximately 65 acres and Kettle Lake, approximately 60 acres.

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Chickakoo Lake and shoreland) for family/recreation lodging, family boating and viewing wetland wildlife. Class 4 (Kettle Lake and remaining area) for hiking and nature study or aesthetic appreciation, and for viewing wetland and upland wildlife.
(ii)	Waterfowl:	Class 1
(iii)	Ungulates:	Class 2

(c) Existing Recreation Development

- Chickakoo Lake Recreation Area (Chickakoo Lake Ecotrail and Kettle Lake Ecotrail, day use area, picnic sites, boat launch, washrooms, nature interpretation area, parking) - trails are also used for mountain biking/mountain bike racing and horseback riding

(d) Special Features or Considerations

- the recreation area is on County land
- the trails are attracting national recognition for mountain bike racing
- there are some problems with horseback riding vs. other types of trail use
- steeper slopes could be susceptible to erosion
- Chickakoo Lake is stocked annually with trout
- power-driven vessels (except those powered by battery-powered electric motors) are prohibited on Chickakoo Lake
- two portions of the recreation area are under lease (one to the Tete Jaune Trail Boy Scouts and the other to the Parkland Junior Forest Wardens), with overnight camping allowed
- hunting and off-highway vehicles are prohibited

(e) Significance

- regional, possibly provincial if promoted, because of its varied and interesting topography; numerous lakes; large, relatively undisturbed woodland; excellent opportunities for viewing waterfowl, small animals and ungulates; boating opportunities; and existing recreation opportunities

(f) Suggested Use(s)

- Extensive recreation with an emphasis on nature study and appreciation, and including non-power boating on Chickakoo and Kettle Lakes

54. CHICKAKOO LAKE RECREATION AREA - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation

(b) **Reasons**

- large area of interesting and varied topography, numerous small lakes and natural woodland
- Class 1 waterfowl capability
- Class 2 ungulate capability
- Class 4 recreation capability for viewing wetland wildlife (Chickakoo Lake and Shoreland)
- Class 4 recreation capability for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation (remaining area including Kettle Lake)

(c) **Potential**

- Chickakoo Lake Recreation Area (three quarter sections of County land) with "ecotrails" around Chickakoo Lake and Kettle Lake is becoming increasingly popular, both for hiking/walking/cross-country skiing and for mountain biking.
- Chickakoo Lake has a Class 4 capability rating for family boating.
- other trails (the Glory Hills cross-country ski trails) are in the area.
- hunting and off-highway vehicles are prohibited.
- Chickakoo Lake is stocked annually with trout.
- Chickakoo Lake Recreation Area offers, to people in the west part of the Region, similar excellent opportunities for extensive recreation as those provided by the Strathcona Wilderness Centre on Bennett Lake.

(d) **Problems**

- environmental sensitivity is probably high because of the lakes and sloughs, high waterfowl capability and steep slopes which may be susceptible to erosion if cleared (no environmentally sensitive areas study has been prepared for the County of Parkland).
- there is pressure to provide for non-compatible outdoor recreation activities (e.g. walking trails vs. equestrian trails).
- fire hazard (the area is closed to all open fires).

(e) **Management Considerations**

- designate the area as a Conservation/Recreation Area in the Regional Plan.
- the Chickakoo Lake Recreation Area is already governed by County of Parkland By-law No. 8-89 (being a by-law of the County to control and regulate the use of parks within the County).
- development of a separate equestrian trail outside the Recreation Area as an alternative to equestrian use within the area.
- the County provides booklets and brochures with nature interpretation information as well as rules and regulations.
- the area is regularly patrolled to enforce the ban on off-highway (ATV) vehicles.
- horseback riding is prohibited during wet conditions, to minimize environmental degradation.

55. TELFORD LAKE - Background Information
(area: Telford Lake Plan area)

(a) Physical and Biophysical Features
- small (surface area approx. 191 acres), long, narrow lake
- largely cleared for agriculture or urban development (western end)
- wetland area at the eastern, outlet, end
- shoreland flat to gently sloping

(b) CLI Capability Rating

(i)	Recreation:	Class 5 (shoreland) for viewing wetland wildlife Class 6 for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest.
(ii)	Waterfowl:	combination of predominately Class 5 with some Class 3
(iii)	Ungulates:	Class 2

(c) Existing Recreation Development: None

(d) Special Features or Considerations
- the City of Leduc's sewage lagoon facilities were located on the south shore, with treated waste released into the lake, (the City is now on the Regional Sewage Line); the ***Telford Lake Plan*** proposes a water quality management program to upgrade water quality but recognizes that Lake water quality will not be appreciably improved in the foreseeable future. Therefore, water based recreation activities will be limited to non-water contact activities.
- partly within the City of Leduc
- the Lake Plan proposes intensive uses with facilities for specific portions of the surrounding land, and extensive recreation for the remaining area
- the ***Telford Lake Plan*** views the lake as a subregional recreation area in which a lake level management program (intended to minimize lake fluctuations and prevent too low water levels) takes precedence over the wildlife protection program. The ESA study for the County of Leduc is not finished, but Telford Lake does not appear to be a regionally significant waterfowl lake. However, there is a wetland area at the east end, around the outlet stream.
- the lake is directly connected to the Gywnne Channel via the outlet stream.

(e) Significance
- could be regionally significant as part of a regional outdoor recreation system, especially if developed and promoted so as to take recreation use pressure off more environmentally sensitive lakes.

(f) Suggested Use(s)
- Intensive recreation at the western end of the lake
- Extensive recreation towards the eastern end

55. TELFORD LAKE - Recreation Potential

(a) Recreation Use(s)

- Intensive recreation for the west half of the lake (as proposed in the ***Telford Lake Plan***).
- Extensive recreation for the east half of the lake, possibly for snowmobile use.

(b) Reasons

Intensive recreation:

- within an urban area, with development along the shore.
- low environmental sensitivity (except perhaps for the shoreline vegetation).
- the ***Telford Lake Plan*** proposes intensive recreation, including sportsfields and a museum, for this area.
- very accessible to large numbers of people.

Extensive recreation, including motorized vehicles

- relatively low environmental sensitivity, especially in winter (disruption to waterfowl possible during the remainder of the year).
- excellent potential for a trial link between Telford Lake, the Gwynne Channel and the Waskahegan Trail (the Gwynne Channel is popular with snowmobiles in winter).

(c) Potential

- the ***Telford Lake Plan*** was prepared in 1983 and is providing the basis for improvements to and developments around the lake.
- the City of Leduc's Urban Park Concept Plan proposes that the entire shore of the lake be protected in its natural state and utilized for a pathway; and that a linkage be made between the eastern end of the lake and the Waskahegan Trail
- the lake provides City residents with a relatively unique opportunity - to have a large, natural water body partly within its boundaries and easily accessible to large numbers of people.

(d) Problems

- although a water quality management program is included in the ***Telford Lake Plan***, it may be many years before lake water quality can be made suitable for water contact recreational activities (the lake was the receptacle for treated waste from the City's sewage lagoons).
- there is potential for conflict between the lake level management program and the wildlife protection program, both of which are important aspects of the ***Telford Lake Plan***. According to the Plan, lake level management takes precedence over possible changes to wildlife habitat which might result from managing the lake level (e.g. stabilizing lake levels).
- the shoreland within the County is privately owned.
- the lake crosses jurisdictional boundaries (however, the City and County worked together on the ***Telford Lake Plan***).

(e) Management Considerations

- a ***Telford Lake Plan*** (1983) has already been prepared.
- the lake and shoreland is a major component of the City and County's recently adopted Urban Park Concept Plan. As with the ***Telford Lake Plan***, the Concept Plan is a means for the two municipalities to co-operate in developing the area to its best potential.
- designate Telford Lake (or at least the east half of the lake) as a Conservation/Recreation Area in the Regional Plan.
- the City has been acquiring land around the lake.

56. LABYRINTH LAKE - Background Information

(area: CLI Class 5 Ungulate Capability)

(a) Physical and Biophysical Features

- 'meandering', poorly defined lake - really an amalgamation of several kettle lakes
- knob and kettle topography (part of the Cooking Lake Moraine)
- largely cleared for agriculture - some treed areas along the "east" shore and on various islands and peninsulas.

(b) CLI Capability Rating

(i)	Recreation:	Class 5 for viewing wetland and upland wildlife and cultural landscape patterns of agricultural or social interest.
(ii)	Waterfowl:	Class 1
(iii)	Ungulates:	Class 5

(c) Existing Recreation Development: None

(d) Special Features or Considerations

- part of an excellent waterfowl area
- could be tied in with Big Hay Lake (a Class 1S lake)
- could be an interesting lake for canoeing
- some Crown land

(e) Significance

- local, unless tied in with Big Hay Lake and the remaining high waterfowl capability area.

(f) Suggested Use(s)

- Extensive recreation with an emphasis on nature observation

56. LABYRINTH LAKE - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation

(b) **Reasons**
- CLI Class 1 waterfowl capability
- still relatively inaccessible
- interesting and varied topography (knob and kettle terrain; prairie "doughnuts")
- very irregular shoreline

(c) **Potential**
- part of a larger area ideal for waterfowl production
- could be an excellent lake for canoeing as well as for nature study
- little existing development other than extensive agriculture

(d) **Problems**
- much of the shoreland is private
- much of the shoreline has been cleared of trees and shrubs
- relatively inaccessible

(e) **Management Considerations**
- designation as a Conservation/Recreation Area in the Regional Plan.
- a joint management plan should be prepared for this area of high waterfowl capability, including Big Hay Lake, Bittern Lake, Labyrinth Lake, Adrian Lake and the numerous tiny sloughs and lakes.
- restrict development to primitive trails, viewing blinds and canoe launch areas.

57. CAWES LAKE - Background Information

(area: tentative area identified in the draft Co. Leduc ESA Study)

(a) **Physical and Biophysical Features**

- shallow lake with variable shoreline (shown as an ephemeral lake on topographic maps)
- in an area of flat to gently rolling agricultural land
- cleared land, except for a thin line of trees along the east shore

(b) **CLI Capability Rating**

(i) Recreation: Class 5 for observing wetland and upland wildlife and cultural landscape patterns of agricultural or social interest.

(ii) Waterfowl: Class 1

(iii) Ungulates: Class 6 (lake)
Class 2 (shoreland)

(c) **Existing Recreation Development:** None

(d) **Special Features or Considerations**

- Class 1 waterfowl lake (slough) adjacent to Edmonton and approx. 1 1/2 miles north of Beaumont
- considered a waterfowl production area, by Alberta Forestry, Lands and Wildlife
- close to Irvine Creek

(e) **Significance**

- probably local, but could be regional if tied in with the Gwynne Channel (via Irvine Creek) and Bretona Pond as nature observation/study areas
- identified in the draft ESA Study for Leduc County as a regionally significant ESA

(f) **Suggested Use(s)**

- Conservation, with emphasis on education/interpretive activities focusing on waterfowl study and observation

57. CAWES LAKE - Recreation Potential

(a) **Recreation Use(s)**

- Specialized Outdoor Recreation Area - educational/interpretive site for nature study

(b) **Reasons**

- Class 1 waterfowl capability
- Close to large urban centres
- Class 2 ungulate capability
- recognized by Alberta Forestry, Lands and Wildlife as a waterfowl production area.

(c) **Potential**

- largely surrounded by Crown land (Alberta Energy and Natural Resources).
- close to Irvine Creek - potential for a trail tie-in with the Gwynne Channel (also a Class 1 waterfowl area).
- could perhaps be promoted as a waterfowl study area, along with the Gwynne Channel and Bretona Pond.

(d) **Problems**

- much of the lake may dry up during dry periods.
- largely cleared for agriculture.

(e) **Management Considerations**

- designation as a Conservation Area in the Regional Plan.
- a Protective Notation has been placed by Forestry, Lands and Wildlife on 40.45 acres (LS1 and 2) in S.E. 10 and 1 acre (Pt. LS13) in N.W. 11-51-24-4, recognizing these areas as waterfowl production areas. No agricultural activities are allowed except unimproved grazing.

THE NORTH SASKATCHEWAN RIVER VALLEY - Background Information

(a) Physical and Biophysical Features

- much natural vegetation
- vegetation depends on slope aspect
- outstanding physical feature of the Region running south-west/north-east
- very steep, unstable valley walls, generally approx. 200 ft. high, except in the Fort Saskatchewan area (approx. 50 ft. high)
- valley floor is generally <1 mile in width; downstream from north-east Edmonton, the valley is 1 1/2 to 2 miles wide
- valley walls susceptible to erosion and slumping; especially when vegetation is removed

(b) CLI Capability Rating

(i) Recreation: Class 4 (except around Big Island - Class 5), at various locations, suitable for organized camping; canoe tripping; angling; viewing upland wildlife, interesting landform features, and vegetation of recreational value; hiking and nature study or aesthetic appreciation; vantage points with superior views; in two locations, downhill skiing; historic and prehistoric sites; and cultural landscape patterns of agricultural, industrial and social interest (river lots)

(ii) Waterfowl: Class 6

(iii) Ungulates: Class 3W (south-west of Edmonton and in locations north-east of Edmonton: north of Clover Bar bridge, south-west and within Fort Saskatchewan, at the mouth of the Sturgeon River, around the Redwater Bridge Islands and much of the intervening area between the latter two locations); Northeast of Fort Saskatchewan, the remainder of the valley is Class 5; south-east of the Fort, the valley is mainly Class 6

(c) Existing Recreation Development

- Capital City Recreation Park and Connors Hill Ski Hill, Pat O'Brien Park (Devon), Turner Park (Fort Saskatchewan), Strathcona Science Park, Fort Saskatchewan Ski Hill.

(d) Special Features or Considerations

- from Devon to Fort Saskatchewan, much of the river valley is Restricted Development Area (RDA) for recreation
- a Class 4 recreation area for extensive recreation activities
- excellent scenic value
- important winter range (the only Class 3W land in the Region) for moose, elk and deer
- flows through, or borders, seven municipalities, and bisects the Region
- excellent linkage potential via tributary rivers and streams (e.g. existing Waskahegan Trail)
- archaeological, historical, cultural, geological and recreational sites
- a "Water Based Recreation and Tourism Component: North Saskatchewan River Basin Study" was prepared by Stewart, Weir and Co.
- an equestrian/multi-use trail from Drayton Valley to Fort Saskatchewan is presently under study
- in 1989, a 36 acre site immediately north of the Devon Bridge in the County of Parkland was donated to the Recreation, Parks and Wildlife Foundation

(e) Significance

- definitely regional (depending on amount of development, could be provincial) because of it length; scenic and recreation value; geological, topographic, vegetation and wildlife value; location with respect to several municipalities; and its historic associations

(f) Suggested Use(s)

- Intensive to extensive recreation use within urban areas (depending on terrain, vegetation, existing development and other factors); extensive recreation in the rural parts of the river valley, generally with limited development (especially in areas of ungulate winter range. The use of power boats is restricted in many areas by river width and depth.
- Class 3W areas of the river could be "Winter Conservation Areas", with the emphasis on summer hiking, canoeing, etc. (since waterfowl capability is very low) and less recreational activity in winter when these areas are being used as winter range by moose, elk and deer from the surrounding uplands.

Note: see also
2. **Pat O'Brien Park (Devon)**
3. **Rabbit Hill**
24. **Strathcona Science Park and Archaeological Centre**
26. **Meander Scar and Oxbow Lake**
30. **Fort Saskatchewan Ski Hill**
51. **Capital City Recreation Park**
52. **Connors Hill Ski Hill**

THE NORTH SASKATCHEWAN RIVER VALLEY - Recreation Potential

(a) **Recreation Use(s)**

- Conservation in Class 3W ungulate areas outside urban boundaries.
- Extensive recreation in remaining rural portions of the river valley.
- Intensive to extensive recreation within urban areas.

(b) **Reasons**

- the North Saskatchewan River is the outstanding topographic feature in the Region, with much natural vegetation.
- the southwest and parts of the northeast sections of the river valley are Class 3W (winter range) for ungulates.
- the entire river valley (except for a Class 5 area around Big Island) has Class 4 recreation capability for wide variety of, mainly dispersed, recreation activities, with (within urban boundaries) associated urban amenities and historical and cultural sites.

(c) **Potential**

- the river valley has great potential for a regional trail that could also connect with the Sturgeon River Valley, the Waskahegan Trail and other existing and potential trail systems (the Waskahegan Trail joins the river valley at Whitemud Creek and at Fort Saskatchewan).
- the river valley is an integral part of the Region's history and is associated with numerous archaeological, historical, cultural, geological, scenic and recreational sites.
- there are a number of potential organized camping sites and canoe launch sites.
- a master plan is being prepared for a proposed equestrian/multi-use trail from Drayton Valley to Fort Saskatchewan, following the River Valley as much as possible.
- a 36 acre site known as Prospectors' Point was recently donated to the Recreation, Parks and Wildlife Foundation. The site, which is located on the north side of the Devon Bridge, consists of a cleared area along the river and a treed area on the top of the steep riverbank. This site is presently undeveloped.

(d) **Problems**

- land use conflicts (e.g. urban uses, utilities, resource extraction).
- some parts of the valley are actually high cliffs; other parts are very susceptible to erosion, especially if the vegetation is removed.
- the valley is bordered primarily by private land.
- trail construction could be difficult to impossible in places, where the valley walls are steep and unstable.
- maintenance of water quality, especially downstream from Edmonton, is a major concern.
- multi-jurisdictional control.
- many sections of the valley are probably very environmentally sensitive (the ESA Study considers parts of the northeast section of the river valley to be Hazard Lands and very environmentally sensitive).

(e) Management Considerations

- those sections of the river valley, outside urban boundaries, rated Class 3W for ungulates should be designated as Nature Conservation Areas, in the Regional Plan (that is, southwest of Edmonton excluding Devon and Rabbit Hill, and northeast of Edmonton: north of the Clover Bar Bridge, southwest of Fort Saskatchewan, at the mouth of the Sturgeon River, around the Redwater Bridge Islands and at various locations in between). These could be "winter conservation areas", with the emphasis on summer hiking, canoeing, etc. and less winter recreational activity when the areas are used as winter range.
- the remaining portions of the river valley should, in most areas, be designated as Conservation/Recreation Areas in the Regional Plan.
- the urban municipalities have done recreation plans for their sections of the river, but the seven municipalities which border the river should coordinate their plans to develop a regional trail system.
- easements may have to be acquired in places at the top-of-the-bank where the valley walls and floor are not suitable for trail construction.
- a regional/inter-municipal management plan is needed for the whole river valley.
- ER should be taken wherever possible along the river valley when subdivision occurs.
- the City of Edmonton Bylaw No. 7188 ***(North Saskatchewan River Valley Area Redevelopment Plan)*** includes the following goals:
  - . to ensure preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System; and
  - . to establish a public metropolitan recreation area.
- The Town of Devon, in conjunction with plans for further recreation development of the river valley within Town boundaries, has initiated discussion with other municipalities and relevant agencies with respect to inter-municipal/regional planning for the North Saskatchewan River Valley.
- Fort Saskatchewan Island Natural Area No. 507 is a 49 acre candidate Conservation Natural Area located in N.E. 4 and S.E. 9-55-22-4 in the M.D. of Sturgeon.
- the Public Lands Division of Alberta Forestry, Lands and Wildlife has responsibility for site management of Provincial Natural Areas, with input from the local planning agencies.

Note: see also **2. Pat O'Brien Park (Devon)**
3. Rabbit Hill
24. Strathcona Science Park and Archaeological Centre
26. Meander Scar and Oxbow Lake
30. Fort Saskatchewan Ski Hill
51. Capital City Recreation Park
52. Connors Hill Ski Hill

THE STURGEON RIVER VALLEY - Background Information

(a) Physical and Biophysical Features

- misfit river with generally low flow; many meander scars and oxbow lakes
- valley divided into three "sections" (1) upstream from Big Lake (>29 ft. deep and approx. 200 ft. wide); (2) from Big Lake to south-west of Gibbons (approx. 100 ft. deep and one and 1/2 miles wide); (3) from south-west of Gibbons to the confluence with the North Saskatchewan River (up to 175 or more feet high and only 1/2 mile wide in places)
- cleared for agriculture in wider, flatter areas; heavily wooded in steeper, narrow sections

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Big Lake area and outlet) for viewing wetland wildlife and (outlet area) for organized camping and canoe tripping predominantly Class 5, with many areas suitable for organized camping, viewing upland wildlife and vegetation with recreational value, canoe tripping and (upstream of Big Lake) angling small section of Class 6 (immediately upstream of Big Lake) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social (river lots) interest
(ii)	Waterfowl:	Class 1 S (Big Lake environs) Class 5 (upstream of Big Lake) Class 4 (downstream of Big Lake)
(iii)	Ungulates:	Class 6 around most of Big Lake Class 2, upstream from Big Lake and along the lake's south shore, and from the "elbow" to the river mouth mainly Class 4 from St. Albert to the "elbow"

(c) Existing Recreation Development

- existing trails, picnic areas, parks and other recreation features within St. Albert; trails along the Gibbon's stretch of the river (Echo Glen Park)

(d) Special Features or Considerations

- CR development east of St. Albert
- existing park development in St. Albert
- proposed Red Willow Park in St. Albert utilizes the Sturgeon River Valley
- existing recreation development in Gibbons
- River Lot 56, a Provincial Natural Area, borders the River
- Big Lake is a provincially significant waterfowl lake which acts as a flood lake for the Sturgeon River
- very historic waterway

(e) Significance

- regional, possibly provincial, because of its scenic value, its historic, archaeological, geological and vegetation value and its association with Big Lake

(f) **Suggested Use(s)**

- Intensive recreation in suitable areas of St. Albert. Extensive recreation throughout the remainder of the river valley (Big Lake - Conservation Area)

Note: see also **43. Big Lake**

THE STURGEON RIVER VALLEY - Recreation Potential

(a) **Recreation Use(s)**

- Intensive recreation in suitable areas of St. Albert and perhaps, Gibbons.
- Extensive recreation throughout the remainder of the valley, except for the north and west shores of Big Lake (Conservation).

(b) **Reasons**

- the river valley is considered an important ungulate movement corridor (ESA Study).
- the City of St. Albert is developing Red Willow Park for a wide range of recreational uses, including intensive recreation activities.
- much of the river valley is rated Class 5 recreational capability for such dispersed activities as viewing upland wildlife and canoe tripping, with some sites also suitable for organized camping.
- the river valley downstream from St. Albert becomes increasingly incised and increasingly more scenic, with heavily wooded slopes in the narrower sections.
- River Lot 56 is a 272-acre surviving patch of original parkland with interesting terrain (ravines and the river bank), relatively natural vegetation and Class 2 ungulate capability.
- Big Lake is a Class 1S waterfowl lake.

(c) **Potential**

- the river valley has excellent regional linkage potential.
- the river is an historic waterway; the historic Fort Assiniboine and Lac Ste. Anne Trails followed the Sturgeon River Valley west from St. Albert; the historic Sturgeon River Mill is located just south of Bon Accord; while Turcotte School and an old Railway trestle bridge are approx. 1 1/2 to 2 miles north of St. Albert.
- Mission Hill (St. Albert) and the Poundmaker Lodge (just east of St. Albert) are associated with the river valley.
- the Concept Plan "Red Willow Urban Park - an Heritage Corridor" has been prepared; the plan provides for an urban recreation corridor which includes wildlife conservation and observation, continuous trail linkages, recreation and sports facilities (e.g golf courses and arenas), historical and cultural sites, nature enjoyment, family activities, boating and canoeing, a downtown focus (Festival Plaza), commercial activities, horticultural gardens and scenic walks/drives. The park is intended to provide both community and regional recreational opportunities, together with urban amenities and historical/cultural sites (e.g Mission Hill, Poundmaker Lodge).
- the historic Athabasca Landing Trail followed the Sturgeon River northeast to Gibbons. This is presently being developed as a historical/recreation corridor.
- River Lot 56 is a Provincial Natural Area adjacent to Edmonton and St. Albert, with potential for links to Red Willow Park and any trail system along the Sturgeon River Valley. The area is already heavily used for hiking, nature observation, cross-country skiing, surveying classes, educational/interpretive activities and institutional camping. Environmental sensitivity is low (ESA Study). The area is policed by the River Lot 56 Natural Area Society and other groups to discourage beer parties, dirtbike riding and vandalism.

- a Joint Area Structure Plan (between Gibbons and the M.D. of Sturgeon) has been prepared for the Sturgeon River Valley in the vicinity of Gibbons. Provincial funding has been promised to begin work on the recreational opportunities proposed on the Plan's Concept Map. The Town of Gibbons has undertaken major park development along the river valley including: hiking/cross-country ski trails, bicycle trails, picnic sites, an adventure playground, fishing pond and "historic" site (the Gibbons Homestead). In the fall of 1990, Gibbons developed a 2.4 km multi-use trail in what is now officially designated as "Echo Glen Park."
- educational/interpretive value, both from an historical aspect (e.g. historical sites, river lot settlement pattern) and from a geomorphological aspect (e.g. upstream from Big Lake, the river is an interesting meandering river with cut-off meanders and ox-bow lakes).
- potential for linkage with Edmonton's utility/transportation RDA corridor.

(d) **Problems**

- some parts of the river valley (including Big Lake) are very environmentally sensitive (ESA Study); although River Lot 56 is considered to have low environmental sensitivity, any clearing or development will destroy its "natural" character (ESA Study).
- there is potential for water pollution from St. Albert.
- where topography permits (e.g. where the valley is flat or the valley walls very low), the land has been cleared for agriculture (especially upstream of Big Lake).
- the whole length of the river from the Region's west boundary to the North Saskatchewan River is considered Hazard Lands, either because of flooding or because of steep slopes susceptible to erosion (ESA Study).
- almost all private land outside urban boundaries.
- CR development already exists in places along the top of the valley, downstream from St. Albert and around Big Lake.
- there is recreational development pressure and existing and potential land use conflicts around Big Lake.

(e) **Management Considerations**

- designation of the north and west shores of Big Lake as a Provincial Environmentally Significant Area, if such legislation were adopted.
- designation of Class 1S portions and remaining immediate shoreland of Big Lake, as well as that portion of the river valley from southwest of Gibbons to the North Saskatchewan River (excluding that portion of the valley within Gibbons' boundaries) as a Nature Conservation Area in the Regional Plan.
- A Sturgeon River Basin Study was prepared in 1977 and should be reviewed and updated if necessary.
- River Lot 56 Natural Area Society is very active as a steward of the Natural Area; this is a good example of what local residents can accomplish.
- River Lot 56 Natural Area No. 453 (Plan 465, River Lot 56) is a 267 acre Recreation Natural Area established by Order-in-Council.
- site management of Provincial Natural Areas is the responsibility of the Public Lands Division of Alberta Forestry, Lands and Wildlife, with input from local planning agencies.

Note: see also **43. Big Lake**

THE REDWATER RIVER VALLEY - Background Information

(a) **Physical and Biophysical Features**

- small, meandering misfit river in a flat-bottomed valley with gradually sloping valley walls, especially the right bank, and steeper walls, 50-75 ft. high on the left bank and near the river mouth

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 for angling, viewing upland wildlife and for hiking and nature study or aesthetic appreciation
(ii)	Waterfowl:	Class 6
(iii)	Ungulates:	predominantly Class 2, with small areas of Class 6

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- Redwater River may act as a wildlife corridor
- could provide a trail link between Redwater and the North Saskatchewan River Valley
- interesting fluvial features
- the valley, from the mouth upstream about 5-6 miles, is considered 'Hazard Lands" due to flooding (1 in 100 year floodplain) (ESA Study)

(e) **Significance**

- local - could be regional if incorporated into a regional trail system

(f) **Suggested Use(s)**

- Extensive recreation for cross-country ski trails in winter; possibly ATV or bike route in summer (since the valley floor is relatively flat and the waterfowl capability is low) (The ESA Study did not classify the Redwater as an ESA, except with respect to those parts of the valley considered to be 'Hazard Lands'.)

THE REDWATER RIVER VALLEY - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation, with possibly ATV or bike use in the summer.

(b) **Reasons**
- the river is a flat bottomed valley with steep slopes in places.
- most of the valley, except the "Hazard Lands" is not environmentally sensitive (ESA Study).
- the valley has Class 2 ungulate capability for much of its length; the ESA Study considers the valley a potential wildlife corridor.
- Class 6 capability for waterfowl.
- Class 5 recreation capability for such dispersed activities as viewing upland wildlife, hiking and nature study.
- the valley has Class 5 recreation capability for angling

(c) **Potential**
- potential trail link between Redwater and both the Redwater Sand Dunes (the "Pines") and the North Saskatchewan River Valley.

(d) **Problems**
- part of the valley, from the mouth upstream for about 5 to 6 miles, is considered "Hazard Lands" due to flooding (ESA Study).
- steep slopes in places may be susceptible to erosion.
- mostly private land.

(e) **Management Considerations**
- designation in the Regional Plan as a Conservation/Recreation Area.
- possible cross-country ski trail route in winter; ATV use or a bike route in summer.

RIVIÈRE QUI BARRE RIVER - Background Information

(a) **Physical and Biophysical Features**

- small, misfit stream, very meandering
- valley approx. 1/2 mile wide, until it opens up onto the wide, low valley of the Sturgeon River
- in places, the valley walls are relatively steep and 50-75 ft.+ high

(b) **CLI Capability Rating**

(i) Recreation: Class 5 (within the Alexander I.R. and from the confluence with the Sturgeon River, north for approx. 2 miles) for observing upland wildlife, organized camping (lower reaches) and viewing both wetland wildlife and cultural landscape patterns of agricultural or social interest (within the I.R.)
Class 6 (remainder) for viewing upland and wetland wildlife and cultural landscape patterns of agricultural or social interest

(ii) Waterfowl: Class 1 (north part of I.R.)
Class 4 (downstream)
Class 3 and Class 5 upstream

(iii) Ungulates: Class 2

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- a tributary stream connects the river with Deadman Lake, a potential nature study site
- a tributary stream connects the River with the Hamlet of Rivière Qui Barre (which has several potential historic buildings)
- potential for a trail in this part of the Region
- watercourse stands out as a corridor of trees and shrubs in an agricultural area
- the historic Fort Assiniboine Trail followed the River north-west to Low Water Lake in I.R.
- any trail could include Rivière Qui Barre slough as an educational feature

(e) **Significance**

- local - could be regional if developed as part of a regional trail system

(f) **Suggested Use(s)**

- Extensive recreation, for hiking and cross-country skiing

RIVIÈRE QUI BARRE RIVER - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation

(b) **Reasons**

- Class 5 and 6 recreation capability for such dispersed activities as viewing upland and wetland wildlife, with some sites suitable for organized camping.
- Class 2 ungulate capability.
- stands out as a treed corridor in an agricultural area.

(c) **Potential**

- potential for a hiking/cross-country ski trail in this part of the Region, with possible side trips to Rivière Qui Barre Slough (nature study), Rivière Qui Barre Hamlet (potential historic buildings) and Deadman Lake (waterfowl).
- historic Fort Assiniboine Trail followed the river northeast from its confluence with the Sturgeon River.

(d) **Problems**

- part of the river flows through the Alexander Indian Reserve.
- remainder of the river valley is private land.

(e) **Management Considerations**

- designate the river "valley" as a Conservation/Recreation Area in the Regional Plan.
- easement or public rights-of-way along the river.

THE WILLOW CREEK/WEED CREEK DRAINAGE SYSTEM - Background Information

(a) Physical and Biophysical Features

- tributaries of the North Saskatchewan River
- lower reaches are in a well-incised valley in an otherwise flat landscape
- lower reaches of the valley are heavily treed with steep, 150-200 ft. high valley walls
- interesting topographic features such as stream terraces
- the upper reaches are considered part of the agricultural area (e.g. not distinguished by soil classification from the surrounding agricultural land) and partly cleared

(b) CLI Capability Rating

(i) Recreation: Class 5 (lower reaches) for viewing upland wildlife, vegetation with recreation value, and for hiking and nature study or aesthetic appreciation

Class 6 (upper reaches) for viewing upland and wetland wildlife and cultural landscape patterns of agricultural or social interest

(ii) Waterfowl: Class 5 (Willow and Lower Weed Creeks)
Class 6 (remainder)

(iii) Ungulates: Class 3W (downstream from Thorsby)
Class 2 (remaining area)

(c) Existing Recreation Development

- none

(d) Special Features or Considerations

- has been used in the past for educational/interpretive activities (U. of A. classes)
- the most interesting portion is the lower 5-6 miles
- the lower reaches provide one of the few winter range areas (Class 3W) for moose, elk and deer in the Region
- lower reaches probably have high environmental sensitivity because of the steep slopes and the Class 3W capability for ungulates

(e) Significance

- could be regional because of its Class 3W capability for ungulates, and its potential as part of a regional trail system

(f) Suggested Use(s)

- Winter Conservation Area because of its Class 3 capability as winter range for ungulates and its steep slopes (lower reaches). Extensive recreation for hiking in summer (lower reaches) and for cross-country skiing and hiking in the upper reaches all year round.

WILLOW CREEK/WEED CREEK DRAINAGE SYSTEM - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation
- Conservation in Class 3W ungulate areas.

(b) **Reasons**

- interesting and attractive topography, especially the well - incised lowest 5-6 miles.
- Class 5 (lower reaches) recreation capability for dispersed activities such as viewing upland wildlife, hiking and nature study.
- lower reaches are Class 3 winter range for moose, elk and deer; upper reaches have Class 2 ungulate capability.
- lower reaches are still wooded.
- upper reaches have Class 6 recreation capability for viewing upland and wetland wildlife.

(c) **Potential**

- educational/interpretive value (fluvial landforms).
- potential for development of a trail from Thorsby to the North Saskatchewan River Valley.

(d) **Problems**

- lower reaches likely have high environmental sensitivity because of the steep ravine walls and Class 3W ungulate capability (but no ESA study completed for this area).
- private land.
- presently designated "Agricultural" in the County of Leduc's GMP and Land Use Bylaw.
- winter recreation activities could interfere with winter range use by ungulates.
- the upper reaches of Weed Creek are outside the Edmonton Metropolitan Region.

(e) **Management Considerations**

- designate the lower reaches (Class 3W ungulate capability) as a Nature Conservation Area in the Regional Plan - with emphasis on "Winter Conservation".
- restrict trail development in the Nature Conservation Area to "primitive" hiking trails for summer use.
- designate the upper reaches as a Conservation/Recreation Area in the Regional Plan.
- develop a hiking/cross-country skiing trail or equestrian trail for year-round use in the upper reaches.
- where necessary, acquire easements or use agreements along the top-of-bank for trails.
- request ER whenever possible when subdivision occurs.

CONJURING CREEK - Background Information

(a) Physical and Biophysical Features

- outlet from Wizard Lake to the North Saskatchewan River
- tributary of the North Saskatchewan River
- small stream in a deeply incised valley (lower third, from the mouth to about 4-5 miles upstream) with steep valley walls 150-200 ft. high
- heavily wooded in the lower reaches (i.e. north of Calmar)
- in the upper reaches, the valley is less distinct and is cleared for agriculture

(b) CLI Capability Rating

(i) Recreation: Class 5 (lower third) for organized camping, viewing upland wildlife and frequent small water bodies or continuous streams occurring in upland areas

Class 6 (upper 2/3rds) for viewing upland and wetland wildlife and cultural landscape patterns of agricultural and social interest

(ii) Waterfowl: Class 5 (lower third)
Class 6 (upper 2/3rds)

(iii) Ungulates: Class 3W (lower 1/4)
Class 2 (upper 3/4s)

(c) Existing Recreation Development

- none

(d) Special Features or Considerations

- there is an old, weathered farm house and out buildings on the west bank west of Calmar and north of Highway 39
- environmental sensitivity is probably high due to steep slopes and the lower valley's Class 3 winter range capability
- potential trail link between Wizard Lake and the North Saskatchewan River (approx. 17 miles)
- some intensive agricultural operations on the top of the bank (also Calmar's sewage treatment facilities)

(e) Significance

- could be regional because of its Class 3 winter range capability for ungulates and its potential as part of a regional trail system

(f) Suggested Use(s)

- Winter Conservation Area in the lower reaches with Extensive Recreation (hiking) allowed in summer and hiking and cross-country skiing allowed along the remainder of the creek. Since the lower reaches are winter range it would be preferable to limit winter recreation activity in the Class 3W portion of the stream valley.

CONJURING CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Conservation in Class 3W ungulate areas
- Extensive recreation.

(b) **Reasons**
- lower reaches are Class 3 winter range for moose, elk and deer.
- interesting ravine topography, especially north of Highway 39.
- heavily wooded in the lower reaches.
- upper reaches have Class 2 ungulate capability.
- Class 5 and 6 for viewing upland wildlife, with some areas in the lower reaches suitable for organized camping.

(c) **Potential**
- potential trail link between Wizard Lake (creek source) and the North Saskatchewan River Valley. (also from Calmar south to Wizard Lake or north to the River).
- prominent landform feature (especially north of Highway 39) in the relatively flat landscape.

(d) **Problems**
- environmental sensitivity is probably high in the lower reaches (no ESA study completed as yet).
- in the upper reaches, the area has been largely cleared for agriculture and the valley is much less distinct.
- some "incompatible" uses along the creek, including intensive agricultural uses (hog farm, stockpens) and Calmar's sewage treatment facilities.
- winter recreational activities could interfere with winter range uses by ungulates.
- private land.
- designated "agricultural" in the County of Leduc's GMP and Land Use Bylaw.

(e) **Management Considerations**
- designate the lower reaches (approx. 4-5 miles from the North Saskatchewan River as a Nature Conservation Area in the Regional Plan.
- recreational use should be based on a "winter conservation" concept with summer use (hiking, wildlife viewing) emphasized so as not to interfere with winter range use by ungulates.
- designate the remainder of the creek as a Conservation/Recreation Area in the Regional Plan, with year-round extensive recreation use.
- acquire easements or "use" agreements from private landowners.

BLACKMUD/WHITEMUD DRAINAGE SYSTEM - Background Information

(a) Physical and Biophysical Features

- Whitemud Creek and its tributary, Blackmud Creek, are tributaries of the North Saskatchewan River
- Blackmud Creek is the outlet for Saunders Lake and the Gwynne Channel
- deeply incised valleys north of Ellerslie, well-wooded, with valley walls >100 ft. high in the lower reaches. In the upper reaches of Whitemud, the valley is less distinct from the surrounding, cleared agricultural land

(b) CLI Capability Rating

(i)	Recreation:	Class 4 (Blackmud/Whitemud Creeks from just north of Ellerslie to the North Saskatchewan River) for organized camping and for viewing upland wildlife and vegetation with recreational value Class 5 (middle reaches of Whitemud Creek and the upper reaches - Saunders Lake to the railway - of Blackmud Creek) for viewing upland wildlife, hiking and nature study or aesthetic appreciation and for a continuous stream in an upland area (Whitemud) and for viewing upland and wetland wildlife (Blackmud) Class 6 (remainder) for viewing upland and wetland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 6 (Blackmud Creek north to Ellerslie, then left bank only and Whitemud Creek from Devon area north to junction with Blackmud) Class 3 (right bank of Blackmud from Ellerslie and right bank of Whitemud from junction with Blackmud) Class 5 (Whitemud upstream from Devon area)
(iii)	Ungulates:	Class 3W from about Ellerslie downstream Class 2 (remaining length)

(c) Existing Recreation Development

- Waskahegan Trail; Rainbow Valley recreation area (including Snow Valley downhill ski facilities, hiking trails and campground), Whitemud Park and other hiking trails

(d) Special Features or Considerations

- the lower reaches of Whitemud Creek are an integral part of the City of Edmonton's parks and recreation system and trail system
- the Waskahegan Trail follows Blackmud/Whitemud Creeks from Saunders Lake and the Gwynne Channel to the North Saskatchewan River
- close to and within large urban centres - numerous access points within the City boundaries

(e) **Significance**

- regional because of the existing facilities in the Edmonton portion, the Waskahegan Trail and the Class 3 winter range for ungulates

(f) **Suggested Use(s)**

- mainly extensive recreation (although part of the creek system is Class 3 winter range). The area is already used, in places, for intensive recreation and by trail users year round. Some portions (within the City of Edmonton boundaries) are already intensively developed.

Note: see also **53. Snow Valley Ski Hill (Edmonton)**

BLACKMUD CREEK/WHITEMUD CREEK DRAINAGE SYSTEM - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation in most areas of the ravine system
- Intensive recreation in specific areas within the urban boundary. (i.e. Whitemud Park and Snow Valley/Rainbow Valley)

(b) **Reasons**

- very interesting and attractive topography especially north of Ellerslie: a deep ravine with well-wooded slopes.
- Class 3W (lower reaches) and Class 2 (upper reaches) ungulate capability.
- the lower reaches (from Ellerslie north) are Class 4 for viewing upland wildlife and vegetation with recreational value. There are also sites suitable, and in some cases (e.g. Rainbow Valley) used, for organized camping.
- south of Ellerslie, much of the creek area is Class 5 for dispersed activities such as viewing upland wildlife, hiking and nature study.
- the Waskahegan Trail follows Blackmud and Whitemud Creeks from Saunders Lake to the North Saskatchewan River Valley; there are other trails within the Whitemud Creek Ravine for hiking, etc.
- parts of the Whitemud Ravine are already developed for intensive recreation (e.g. Snow Valley Ski Hill, Whitemud Creek Park).

(c) **Potential**

- the City of Edmonton considers, and is developing, those portions of Blackmud and Whitemud Creeks within the urban boundaries as an integral part of its outdoor recreation/trail system.
- there is potential for upgrading the Waskahegan Trail and for extending a trail (perhaps an equestrian trail) south along Whitemud Creek.

(d) **Problems**

- much of the land outside the urban boundary is private.
- no ESA study has been completed for the County of Leduc.
- incompatible land uses and pressures for recreational and other types of development.
- steep ravine walls susceptible to erosion and slumping if the vegetation is disturbed.

(e) Management Considerations

- designation in the Regional Plan as a Conservation/Recreation Area.
- at present, the Waskahegan Trail Association has obtained permission from private landowners to cross their land. Attempts should be make to formalize any right-of-way agreement (e.g. easements, MR, ER) so public passage is not cut off in the future.
- the City of Edmonton has prepared a recreation strategy for those portions of Whitemud and Blackmud Creeks within the urban boundary. ***(Whitemud and Blackmud Ravines Trails Development Plan)***. Recommendations include designating the Whitemud/Blackmud Ravine Park as a nature preserve (which would make it the first area so designated under the City's jurisdiction), the preparation of the Whitemud/Blackmud Ravine Park Management Plan, the development of the Ravine as a pedestrian oriented nature park, the retention of the wilderness character and adventure quality of the ravines and the identification and preservation of features of special natural or historical interest.
- the City has acquired more than 950 acres of land within the Whitemud and Blackmud Ravines; additional land is being acquired on an on-going basis as subdivisions are registered.

Note: see also **53. Snow Valley Ski Hill (Edmonton)**

CLEARWATER CREEK - Background Information

(a) **Physical and Biophysical Features**

- a small stream draining from the hummocky dead-ice moraine of the Cooking Lake Moraine (near New Sarepta) westward to the Gwynne Channel (Blackmud Creek)
- a shallow watercourse with some trees, in an area largely cleared for agriculture

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 (except Class 6 at the creek mouth) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	Class 1 (upper reaches) Class 2 (mid-reaches) Class 4 (lower reaches)
(iii)	Ungulates:	mainly Class 2, with some Class 1 sections in the mid-and upper reaches

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- possible trail link between New Sarepta and Blackmud Creek (Waskahegan Trail)
- one of the few creeks flowing east to west
- although a shallow watercourse, this is still a distinct landscape feature

(e) **Significance**

- local, unless tied into a regional trail system, then regional

(f) **Suggested Use(s)**

- Extensive recreation - could be utilized for hiking and cross-country skiing, with a "parallel" trail - for horses or snowmobiles, following Irvine Creek to the north.

CLEARWATER CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- a shallow watercourse, with some trees, in an area largely cleared for agriculture.
- mainly Class 5 recreation capability for viewing upland and wetland wildlife.
- areas of Class 1 and Class 2 waterfowl capability.
- mainly Class 2, with some areas of Class 1, ungulate capability.

(c) **Potential**
- possible trail link between New Sarepta and Blackmud Creek (the Waskahegan Trail).
- could also connect to Big Hay Lake.
- a distinct landscape feature and one of the few creeks flowing east to west.

(d) **Problems**
- may be dry during dry periods (according to subdivision files).
- private land.
- no ESA study completed for the County of Leduc.

(e) **Management Considerations**
- designation as a Conservation/Recreation Area in the Regional Plan.
- perhaps could be utilized for hiking and cross-country skiing (with a "parallel" trail for horses or snowmobiles following Irvine Creek to the North).

IRVINE CREEK - Background Information

(a) Physical and Biophysical Features

- small creek flowing west from the knob and kettle terrain of the Cooking Lake Moraine onto relatively flat land west of Cawes Lake
- minor watercourse, largely cleared for agriculture, partly channelized

(b) CLI Capability Rating

(i)	Recreation:	Class 5 and Class 6 (last two miles ± from mouth) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest
(ii)	Waterfowl:	mainly Class 4 some short stretches of Class 1 and Class 2
(iii)	Ungulates:	mainly Class 2 some short stretches of Class 1, Class 3 and Class 5

(c) Existing Recreation Development

- none

(d) Special Features or Considerations

- receives stormwater runoff from Beaumont
- one of few streams flowing east to west

(e) Significance

- local, could be regional if tied into a regional trail system

(f) Suggested Use(s)

- Extensive recreation - perhaps used as an equestrian and/or snowmobile trail, in conjunction with Clearwater Creek as a hiking/cross-country ski trail

IRVINE CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- mainly Class 5 recreation capability for viewing wetland and upland wildlife.
- mainly Class 2 ungulate capability.
- some areas of Class 1 and Class 2 waterfowl capability.
- minor watercourse in an agricultural area.

(c) **Potential**
- flows west from the Cooking Lake Moraine to join Blackmud Creek - potential for a trail.

(d) **Problems**
- largely cleared for agriculture.
- no ESA study completed as yet for the County of Leduc.
- receives storm water from Beaumont's stormwater drainage system.
- sections of the watercourse have been channelized.

(e) **Management Considerations**
- designation as a Conservation/Recreation Area in the Regional Plan.
- perhaps development as an equestrian (summer) and/or snowmobile (winter) route to compliment a hiking/cross-country ski trail along Clearwater Creek.

MILL CREEK - Background Information

(a) Physical and Biophysical Features

- a tributary of the North Saskatchewan River
- drains north-west from Bretona Pond
- a minor watercourse in the knob and kettle terrain around Bretona Pond
- has created an impressive ravine north of Argyll Road (Edmonton) with valley walls up to 100 ft. high near the mouth
- mostly forested along its length, specially within Mill Creek Ravine

(b) CLI Capability Rating

(i) Recreation: (not classified within the 1972 City boundaries)
Class 5 (for approx. 2 1/2 miles downstream from Bretona Pond) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest

Class 6 (to 1972 City boundary) for viewing upland and wetland wildlife and cultural landscape patterns of agricultural and social interest

(ii) Waterfowl: Class 1 (for approx. 2 1/2 miles downstream from Bretona Pond)

Class 3 (for approx. 1 1/2 miles)

Class 5 (to the 1972 City boundary)
(probably Class 5 or 6 for the remaining valley)

(iii) Ungulates: Class 2 (from Bretona Pond to the 1972 City boundary)

(c) Existing Recreation Development

- Mill Creek Ravine Park (trails, bike paths, picnic areas, Mill Creek swimming pool, tobogganing)

(d) Special Features or Considerations

- within Edmonton's boundaries, Mill Creek Ravine is an integral part of the City's parks and recreation system
- potential link between Bretona Pond and the River is disrupted by industrial development in south-east Edmonton
- the historic Cooking Lake Trail ran along Mill Creek and Bretona Pond
- within a large urban area

(e) Significance

- local - could be regional because of its topography, vegetation, existing development

(f) Suggested Use(s)

- Extensive recreation (already developed in part) for hiking and cross-country skiing, nature study (near Bretona Pond)

MILL CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- already developed in part (Mill Creek Ravine Park in Edmonton).
- Class 1 waterfowl capability from Bretona Pond (headwaters) about 2 1/2 miles downstream.
- Class 2 ungulate capability.
- already part of an extensive trail system in Edmonton.

(c) **Potential**
- within Edmonton's boundary, Mill Creek Ravine is an integral part of the City's outdoor parks and recreation system.
- the historic Cooking Lake Trail ran along Mill Creek and Bretona Pond.

(d) **Problems**
- any direct link between Bretona Pond and the North Saskatchewan River Valley is disrupted by industrial development in Southeast Edmonton (south of Argyll Road).
- private land outside City boundaries except around Bretona Pond.

(e) **Management Considerations**
- designate the creek as a Conservation/Recreation Area in the Regional Plan.

OLDMAN CREEK - Background Information

(a) **Physical and Biophysical Features**

- a small tributary of the North Saskatchewan River
- flows north-west from Boag Lake
- in the upstream portion, valley relief is about 50 ft., with gradual slopes
- from Akenside downstream, relief is over 50 ft., with steep ravine walls

(b) **CLI Capability Rating**

(i) Recreation: Class 5 (from Boag Lake about 2 1/2 miles downstream, and about 1 1/2 miles upstream from the mouth) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest

Class 6 (remainder) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest

(ii) Waterfowl: mainly Class 3, with some Class 1 (near Boag Lake)

Class 6 (in the downstream, more incised portion)

(iii) Ungulates: Class 2

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- according to the ESA Study, Lower Oldman Creek has "interesting ravine features and may have sportfish ..."
- north of Boag Lake, municipal reserve has been taken along the creek when CR subdivision has occurred
- there is also Country land along the north bank of the Creek in the Akenside area
- slopes of the Lower Oldman Creek are susceptible to erosion

(e) **Significance**

- probably local relative to other watercourses

(f) **Suggested Use(s)**

- Extensive recreation - emphasis on hiking/cross-country skiing and nature observation - could perhaps be developed as an equestrian trail to complement a hiking/cross-country ski trail along Pointe-aux-Pins Creek.

OLDMAN CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation.

(b) **Reasons**
- interesting topography especially in the lower (ravine) reaches.
- Class 2 waterfowl capability.
- mainly Class 3 ungulate capability.
- there may be sportfish in the lower reaches.

(c) **Potential**
- could perhaps be developed as an equestrian trail from Boag Lake to the North Saskatchewan River Valley.
- north of Boag Lake, MR has been taken along the Creek when subdivision has occurred; and there is some County land in the Akenside area.
- the ***Strathcona Outdoor Master Plan*** proposes a hiking trail along Oldman Creek.
- could tie-in with a North Saskatchewan River Valley Trail.

(d) **Problems**
- ravine walls of the lower Oldman Creek may be susceptible to erosion and slumping if vegetation is disturbed.
- mainly private land.
- lower Oldman Creek is considered environmentally sensitive (ESA Study, ***Strathcona Outdoor Master Plan***).
- much of the upper reaches of the Creek has been cleared for agriculture.

(e) **Management Considerations**
- designation in the Regional Plan as a Conservation/Recreation Area.
- perhaps development of an equestrian trail to complement a potential hiking/cross-country skiing/nature study trail along Pointe-aux-Pins Creek.
- MR or ER should be taken whenever possible along the Creek, when subdivision occurs.

POINTE-AUX-PINS CREEK - Background Information

(a) Physical and Biophysical Features

- a small tributary stream of the North Saskatchewan River
- wooded along much of its length
- drains north-west from the hummocky dead-ice moraine around Ardrossan
- very shallow valley near Highway 16, with a steeper walled, more enclosed valley (50-75 ft.+ high walls), opening upon flatter ground north-west to Highway 55, then entering a narrow, steep walled (50 ft.+) valley, then flowing through the relatively flat land of the meander scar to join the North Saskatchewan River

(b) CLI Capability Rating

(i) Recreation: Class 5 (for approx. 3 1/2 miles north of Ardrossan) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation

Class 6 (remaining length) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural and social interest

(ii) Waterfowl: mainly Classes 4, 5 & 6, with some small areas of Class 1 (near Ardrossan) and Class 2

(iii) Ungulates: mainly Class 1, with some Class 2 sections

(c) Existing Recreation Development

- none

(d) Special Features or Considerations

- includes two significant features: the Soapholes and the Meander Scar/Oxbow Lake
- good potential as a "nature trail"
- wildlife travel corridor (ESA Study)
- slopes of lower reaches may be prone to erosion
- the watercourse is highly sensitive to disturbance (ESA Study)

(e) Significance

- regional possibly provincial, because of the high ungulate capability (wildlife corridor), unique soapholes and interesting meander scar/ox bow lake and its potential as a nature trail with educational/interpretive features

(f) Suggested Use(s)

- Extensive recreation - trails, with emphasis on a "nature trail" for walking, hiking and cross-country skiing. Could be developed in conjunction with an equestrian trail along Oldman Creek.

Note: see also **25. Pointe-Aux-Pins Soapholes**

POINTE-AUX-PINS CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation, with an emphasis on "nature study".

(b) **Reasons**
- varying topography, from fairly flat to steep (50-75 ft. high ravine walls).
- wooded along much of its length, interesting ravine habitat.
- mainly Class 1, with some Class 2, ungulate capability; considered an important wildlife corridor (ESA Study).
- Class 5 and 6 recreation capability for dispersed activities such as viewing wetland and upland wildlife, hiking and nature study.
- interesting features (soapholes, meander scar and oxbow lake).

(c) **Potential**
- educational/interpretive value.
- good potential for an "Eco trail" (nature trail) to take advantage of the interesting features and wildlife potential.
- could link up with a North Saskatchewan River Valley trail.
- the proposed Strathcona Heritage Bike Pathway is to follow the lower reaches of the creek.

(d) **Problems**
- private land.
- the watercourse is highly sensitive to development and disturbance, and the valley walls are prone to erosion (ESA study).

(e) **Management Considerations**
- designation as a Conservation/Recreation Area in the Regional Plan.
- emphasis on development of a nature trail, for walking, hiking, cross-country skiing and snowshoeing, with side trips to the soapholes and meander scar (as well as interpretive signs or an interpretive centre in the meander scar area.
- need for easements, rights-of-way or other agreements with private land owners.
- the lower reaches are within the North Saskatchewan River Valley RDA.

Note: see also **25. Pointe-Aux-Pins Soapholes**

ROSS CREEK - Background Information

(a) Physical and Biophysical Features

- drains Trapper's Lake, running north-west to the North Saskatchewan River
- largely wooded watercourse
- generally wide, shallow valley (especially between the CPR line and the Fort), but steeper - walled (50 ft.+), more confined valley near Partridge Hill

(b) CLI Capability Rating

(i)	Recreation:	Class 5 (from Trapper's Lake to approx. 2 miles north-west of Partridge Hill) for viewing wetland and upland wildlife and for hiking and nature study or aesthetic appreciation Class 6 (remainder) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural, industrial or social interest
(ii)	Waterfowl:	Class 1 in the Partridge Hill area Class 3 north of the creek Class 5 south of the creek some Class 2, 3 & 4 near the headwaters
(iii)	Ungulates:	Class 1 around Partridge Hill Class 2 (remainder)

(c) Existing Recreation Development

- Waskahegan Trail

(d) Special Features or Considerations

- valley walls are erosion prone and the water course has high sensitivity to development and disturbance (ESA Study)
- the Waskahegan Trail, connecting Elk Island Park with Fort Saskatchewan, follows Ross Creek
- Partridge Hill School (1911) and Partridge Hill United Church (1902) are interesting focal points on Ross Creek
- important wildlife corridor
- there may be sportfish in the lower reaches

(e) Significance

- regional, because of the existing Waskahegan Trail and its value as an important wildlife corridor

(f) Suggested Use(s)

- Extensive recreation - hiking and cross-country ski trails - continued development of the Waskahegan Trail.

ROSS CREEK - Recreation Potential

(a) **Recreation Use(s)**
- Extensive recreation

(b) **Reasons**
- Class 5 and 6 recreation capability for dispersed activities such as viewing wetland and upland wildlife, hiking and nature study.
- the Waskahegan Trail follows Ross Creek from Trapper's Lake Forest and Elk Island National Park to Fort Saskatchewan.
- Class 1 ungulate capability near Partridge Hill; Class 2, in the remaining area; considered an important wildlife corridor (ESA Study).
- Class 1 waterfowl capability in the Partridge Hill area; Classes 2 to 5 along various parts of the creek.
- largely wooded watercourse with varying topography.

(c) **Potential**
- continued development of the Waskahegan Trail for hiking and cross-country skiing.
- there may be sportfish in the lower reaches.

(d) **Problems**
- the valley walls are erosion prone and the watercourse has high sensitivity to development and disturbance (ESA study).
- private land.
- some CR along the creek.
- flows through both the County of Strathcona and Fort Saskatchewan.

(e) **Management Considerations**
- designation of the creek as a Conservation/Recreation Area in the Regional Plan.
- upgrade the Waskahegan Trail and formalize "rights-of-way" across private land.
- request MR and ER along the Creek whenever subdivision occurs.

ASTOTIN CREEK - Background Information

(a) **Physical and Biophysical Features**

- a tributary of Beaverhill Creek, joining the Creek approx. 3 miles south of the North Saskatchewan River
- drains Astotin Lake (Elk Island Park) running north-west to Scotford, then north-east (past the Astotin Natural Area)
- "sinuous creek valley that is relatively non-incised through most of its channel" flowing through "small, marshy floodplains" which are important wetland habitat and "low sand dune areas" (ESA Study)

(b) **CLI Capability Rating**

(i)	Recreation:	Class 5 (Astotin Lake to Hwy 16 and Scotford to Beaverhill Creek) for viewing wetland and upland wildlife, for hiking and nature study or aesthetic appreciation (upper reaches) or interesting landform features - sand dune area (lower reaches) Class 6 (between Hwy 16 and Scotford) for viewing wetland and upland wildlife and cultural landscape patterns of agricultural, industrial or social interest
(ii)	Waterfowl:	predominantly Class 5 Class 2 for about 2 1/2 miles west of Astotin Lake and around Scotford Class 4 in the lower reaches
(iii)	Ungulates:	predominantly Class 2 small area of Class 1 north of Scotford Class 3 near Astotin Lake Combination Class 4 and 6 near Astotin Natural Area

(c) **Existing Recreation Development**

- none

(d) **Special Features or Considerations**

- wildlife travel corridor (ESA Study)
- good beaver habitat (ESA Study)
- the watercourse is very sensitive to development and the flooding hazard is high (ESA Study)
- could be tied in with the Astotin Natural Area

(e) **Significance**

- probably local, because of its location in the far north-east corner of the Region and because the wetland character of the watercourse would not lend itself to heavy use by hikers, etc.

(f) **Suggested Use(s)**

- Extensive recreation with little development (because of the marshy character of the floodplain) and with the emphasis on nature study.

ASTOTIN CREEK - Recreation Potential

(a) **Recreation Use(s)**

- Extensive recreation , with an emphasis on nature study.

(b) **Reasons**

- Class 5 and 6 recreation capability for such dispersed activities as viewing upland and wetland wildlife, hiking, nature study and viewing interesting landforms (sand dunes).
- considered a wildlife travel corridor (ESA study); mainly Class 2 ungulate capability, with some Class 1,3,4 and 6 areas.
- various habitats along its length including "small, marshy floodplains" and "low sand dune areas" (ESA study).
- good beaver habitat (ESA Study).

(c) **Potential**

- potential for a "wetlands" nature trail, tied in with Astotin Nature Area.

(d) **Problems**

- the watercourse is very sensitive to disturbance and development, and the flooding hazard is high (ESA Study).
- the wetland character of the watercourse would not lend itself to heavy use by hikers, etc.
- portions of the Creek are in an area zoned for Heavy Industrial in the County of Strathcona Land Use Bylaw.
- private land outside Astotin Natural Area.
- under two municipal jurisdictions: County of Strathcona and County of Lamont.

(e) **Management Considerations**

- designation as a Conservation/Recreation Area in the Regional Plan.
- minimal development (possible boardwalks in marshy areas) for a nature trail.
- MR or ER along the Creek requested whenever subdivision occurs.

Appendix 2
Canada Land Inventory

Description of Land Capability Maps

The Canada Land Inventory (CLI) Capability Maps were prepared in 1972 for the Department of the Environment. With few exceptions, urban areas were not classified. Thus, information is not available for some of the outdoor recreation areas included in this study. At the same time, urban growth in the Edmonton Region has no doubt had a significant impact on recreation, waterfowl and ungulate capability in areas annexed and developed by urban centres since 1972.

The following is taken directly from the Descriptive Legend for the CLI Capability Maps for Recreation, Waterfowl and Ungulates.

In terms of Land Capability for Recreation, seven classes of land are differentiated on the basis of the intensity of outdoor recreational use, or the quantity of outdoor recreation, which may be generated and sustained per unit area of land per annum, under perfect market conditions.

"Quantity" may be measured by visitor days, a visitor day being any reasonable portion of a 24 hour period during which an individual person uses a unit of land for recreation.

"Perfect market conditions" implies uniform demand and accessibility for all areas, which means that location relative to population centres and to present access do not affect the classification.

Intensive and dispersed activities are recognized. Intensive activities are those in which relatively large numbers of people may be accommodated per unit area, while dispersed activities are those which normally require a relatively larger area per person. [Therefore, those areas best suited for dispersed activities - such as hiking or bird-watching - do not rate higher than Class 4.]

Some important factors concerning the classification are:

- The purpose of the inventory is to provide a reliable assessment of the quality, quantity and distribution of the natural recreation resources within the settled parts of Canada.

- The inventory is of an essentially reconnaissance nature, based on interpretation of aerial photographs, field checks, and available records, and the maps should be interpreted accordingly.

- The inventory classification is designed in accordance with present population preferences in non-urban outdoor recreation. Urban areas (generally over 1,000 population with permanent urban character), as well as some non-urban industrial areas, are not classified.

- Land is ranked according to its natural capability under existing conditions, whether in natural or modified state; but no assumptions are made concerning its capability given further major artificial modifications.

- Sound recreation land management and development practices are assumed for all areas in practical relation to the natural capability of each area.

- Water bodies are not directly classified. Their recreational values accrue to the adjoining shoreland or land unit.

- Opportunities for recreation afforded by the presence in an area of wildlife and sport fish are indicated in instances where reliable information was available, but the ranking does not reflect the biological productivity of the area. Wildlife capability is indicated in a companion series of maps.

Class 1 lands have natural capability to engender and sustain very high total annual use based on one or more recreational activities of an intensive nature. Class 1 land units should be able to generate and sustain a level of use comparable to that evident at an outstanding and large bathing beach or a nationally known ski slope.

Class 2 lands have natural capability to engender and sustain high total annual use based on one or more recreational activities of an intensive nature.

Class 3 lands have natural capability to engender and sustain moderately high total annual use based usually on intensive or moderately intensive activities.

Class 4 lands have natural capability to engender and sustain moderate total annual use based usually on dispersed activities.

Class 5 lands have natural capability to engender and sustain moderately low total annual use based on dispersed activities.

Class 6 lands lack the natural quality and significant features to rate higher, but have the natural capability to engender and sustain low total annual use based on dispersed activities.

Class 7 lands have practically no capability for any popular types of recreation activity, but there may be some capability for very specialized activities with recreation aspects, or they may simply provide open space.

Subclasses indicate the kinds of features which provide opportunity for recreation. They are, therefore, positive aspects of land and do not indicate limitations to use. Features may be omitted from a unit, either because of the imposed three-feature limit, or because their presence was unknown or unconfirmed.

The degree to which these feature are judged capable, collectively, of generating and sustaining use for recreation, determines the class. The sequence in which they are listed indicates the order of their significance. Subordinate features may be relatively insignificant and the class of a unit should not be interpreted to indicate the capability of a secondary or tertiary feature.

The subclasses[1] include:

> **Subclass A** - land providing access to water affording opportunity for angling or viewing of sport fish.
>
> **Subclass B** - Shoreland capable of supporting family beach activities. In high class units this will include family bathing. In Classes 4 and 5, the activities may be confined to dry land due to cold water or other limitations.
>
> **Subclass C** - Land fronting on and providing direct access to waterways with significant capability for canoe tripping.
>
> **Subclass D** - Shoreland with deeper inshore water suitable for swimming or boat mooring or launching.

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[1] Subclasses not present in the Edmonton Region were not included.

Subclass E - Land with vegetation possessing recreational value.

Subclass H - Historic or pre-historic site.

Subclass K - Shoreland or upland suited to organized camping, usually associated with other features.

Subclass L - Interesting landform features other than rock formations.

Subclass M - Frequent small water bodies or continuous streams occurring in upland areas.

Subclass N - Land (usually shoreland) suited to family or other recreation lodging use.

Subclass O - Land affording opportunity for viewing of upland wildlife.

Subclass P - Areas exhibiting cultural landscape patterns of agricultural, industrial or social interest.

Subclass Q - Areas exhibiting variety, in topography or land and water relationships, which enhances opportunities for general outdoor recreation such as hiking and nature study or for aesthetic appreciation of the area.

Subclass S - Combination of slopes, snow conditions and climate providing downhill skiing opportunities.

Subclass V - A vantage point or area which offers a superior view relative to the class of the unit(s) which contain it, or a corridor or other area which provides frequent viewing opportunities.

Subclass W - Land affording opportunity for viewing of wetland wildlife.

Subclass Y - Shoreland providing access to water suitable for popular forms of family boating.

Subclass Z - Areas exhibiting major, permanent, non-urban man-made structures of recreational interest.

In terms of Land Capability for Waterfowl, in general the needs of all waterfowl are much alike; each individual and species must be provided with a sufficient quality and quantity of food, protective cover, and space to meet its needs for survival, growth, and reproduction. The ability of the land to meet these needs is determined by the individual requirements of the species or group under consideration, the physical characteristics of the land, and those factors that influence the plant and animal communities.

On this map the land is divided into units on the basis of physiographic characteristics important to waterfowl populations. The degree of limitation associated with each unit determines its capability class. The subclass denotes the primary factor that causes the limitation.

This classification system is based on two important considerations.

- Capability ratings are established on the basis of the optimum vegetational stage (successional stage) that can be maintained when good wildlife management is practised.
- Capability ratings assigned do not reflect present land use (except in extreme cases such as heavily populated urban areas), ownership, lack of access, distance from cities or amount of hunting pressure.

Class 1 lands have no significant limitations to the production of waterfowl. Capability on these lands is very high. They provide a wide variety and abundance of important habitat elements; rolling topography is well suited to the formation of wetlands. Predominant water areas on these lands are both shallow and deep permanent marshes, and deep, open water areas with well-developed marsh edges.

Class 1S water areas are a special class of Class 1 areas that also serve as important migration stops.

Class 2 lands have very slight limitations to the production of waterfowl. Capability on these lands is high but less than Class 1. Slight limitations are due to climate, fertility, or permeability of the soils. Topography tends to be more undulating than rolling; a higher proportion of the water areas than in Class 1 are small temporary ponds or deep, open water areas with poorly developed marsh edges.

Class 3 lands have slight limitations to the production of waterfowl. Capability on these lands is moderately high, but productivity may be reduced in some years because of occasional droughts. Slight limitations are due to climate or to characteristics of the land that affect the quality and quantity of habitat. These lands have a high proportion of both temporary and semipermanent shallow marshes poorly interspersed with deep marshes and bodies of open water.

Class 4 lands have moderate limitations to the production of waterfowl. Capability on these lands is moderate. Limitations are similar to those in Class 3, but the degree is greater. Water areas are predominately temporary ponds, or deep, open waters with poorly developed marsh edges, or both.

Class 5 lands have moderately severe limitations to the production of waterfowl. Capability on these lands is moderately low. Limitations are usually a combination of two or more of the following factors: climate, soil moisture, permeability, fertility, topography, salinity, flooding, and poor interspersion of water areas.

Class 6 lands have severe limitations to the production of waterfowl. Capability on these lands is very low. Limitations are easily identified. They may include aridity, salinity, very flat topography, steep-sided lakes, extremely porous soils, and soils containing few available minerals.

Class 7 lands have such severe limitations that almost no waterfowl are produced. Capability on these lands is negligible or nonexistent. Limitations are so severe that waterfowl production is precluded or nearly precluded.

In terms of Land Capability for Ungulates (moose, elk and deer), in general the needs of all ungulates are much alike; each individual and species must have a sufficient quality and quantity of food, protective cover, and space to meet its needs for survival, growth, and reproduction. The ability of the land to meet those needs is determined by the individual requirements of the species or group of species under consideration, the physical characteristics of the land, and those factors, such as climate, that influence the plant and animal communities.

On this map the land is divided into units on the basis of physiographic characteristics important to wild ungulates. The degree of limitation associated with each unit determines its capability class. The subclass denotes the primary factor that causes the limitation.

This classification system is based on two important considerations:

- Capability ratings are established on the basis of the optimum vegetational stage (successional stage) that can be maintained with good wildlife management practices.

- Capability ratings assigned do not reflect present land use (except in extreme cases such as heavily populated urban areas), ownership, lack of access, distance from cities, or amount of hunting pressure.

Class 1 lands have no significant limitations to the production of ungulates. Capability of these lands is high. They provide a wide variety and abundance of food plants and other habitat elements.

Class 2 lands have very slight limitations to the production of ungulates. Capability of these lands is high but less than Class 1. Slight limitations are due to climatic or other factors.

Class 3 lands have slight limitations to the production of ungulates. Capability on these lands is moderately high, but productivity may be reduced in some years. Slight limitations are due to characteristics of the land that affect the quality and quantity of habitat, or to climatic factors that limit the mobility of ungulates or the availability of food and cover.

Class 3W lands are a special class of Class 3 areas that are winter ranges on which animals from surrounding areas depend.

Class 4 lands have moderate limitations to the production of ungulates. Capability on these lands is moderate. Limitations are similar to those in Class 3, but the degree is greater.

Class 5 lands have moderately severe limitations to the production of ungulates. Capability on these lands is moderately low. Limitations are usually a combination of two or more of climate, soil moisture, fertility, depth to bedrock or other impervious layer, topography, flooding, exposure, and adverse soil characteristics.

Class 6 lands have severe limitations to the production of ungulates. Capability on these lands is very low. Limitations are so severe that they are easily recognized; for example, soil depth may be negligible or climatic factors so extreme that ungulate populations are severely reduced.

Class 7 lands have limitations so severe that there is no ungulate production.

At a 1:250,000 scale, Canada Land Inventory Maps can provide only a general idea of land capability. For the purposes of this study, the CLI maps allow comparison of outdoor recreation areas based on standardized capability classification. For purposes of development, more detailed, site-specific studies are essential.

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